

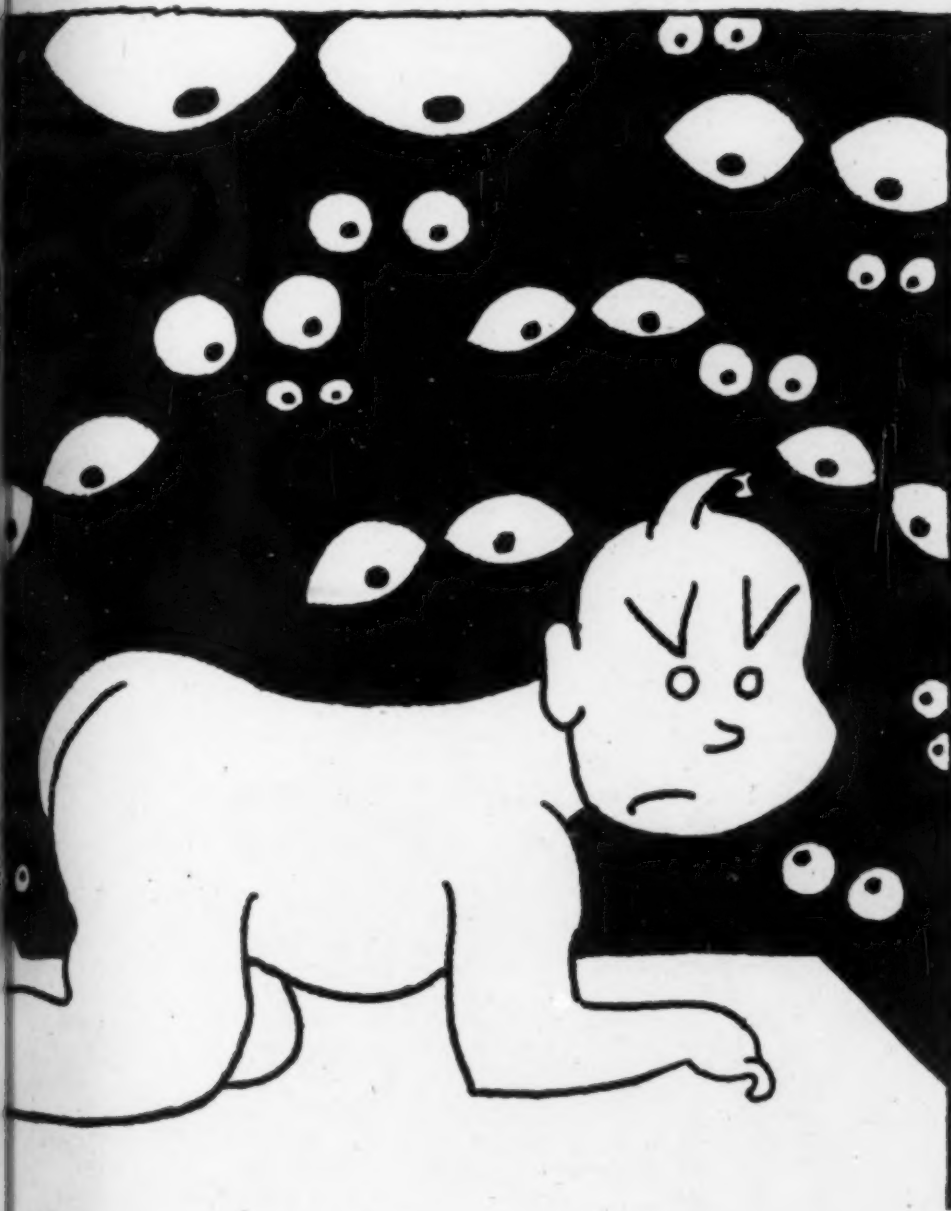
# Consumer Reports

"FACTS YOU NEED  
BEFORE YOU BUY"

VOL. 11, NO. 3

Published Monthly by Consumers Union

MARCH, 1944



KAISER-FRAZER CARS

RATINGS OF BEER

GARDENING HOBBIES

FACE POWDERS

SULFA: USE & ABUSE

TABLE MODEL  
RADIOS

RUGS: CARE & REPAIR

RH BLOOD FACTOR

HEALTH INSURANCE

STORAGE BATTERIES

YOUR CHILD: A PSYCHIATRIST'S ADVICE

# Birthday Greetings from Mr. Bowles

OFFICE OF PRICE ADMINISTRATION

Washington 25, D. C.

Office of the Administrator

Dr. Colston E. Warne, President  
Consumers Union of U. S., Inc.  
17 Union Square West  
New York 3, New York

Dear Dr. Warne:

On this occasion of the Tenth Anniversary of Consumers Union, I want to take the opportunity to express the deep appreciation of the Office of Price Administration for the continued efforts of your organization in helping make price control, rent control, and rationing programs fully effective nationally and in every community.

Success of these programs, as you know, has directly depended upon widespread understanding, support and participation of the American people, and particularly in their economic roles, not only as producers but also as consumers. Toward the latter objective, Consumers Union, in my opinion, has made an outstanding contribution.

The fact that you from time to time have been constructively critical of our proposed or current price programs has been of definite help to us in our work. You have provided a voice for America's consumers who as you recognize are not nearly as

well organized as are America's producers. Through it all, furthermore, you have never lost sight of our major goal—that is, to keep prices steady both during the war and the postwar period.

We still have a big job ahead of us in the fields of price and rent control. On the one hand there are a number of short-sighted pressure groups who inside and outside of Washington are doing their utmost to have ceiling prices raised or eliminated entirely within the next few months. On the other there are many organizations including your own who are actively at work in helping hold the line on prices until it is safe to remove controls.

You can be assured that we in OPA are pledged to do all within our power to maintain the stable price levels which we believe are essential to the encouragement of full production, full employment and full consumption. If we all work together we shall have a prosperous postwar nation,—in fact, far more prosperous for all our people than ever before.

Sincerely,

*Chester Bowles*

Administrator

**CONSUMERS UNION** is a non-profit organization chartered under the Membership Corporation Laws of New York State. Its purpose is to furnish unbiased, usable information to help families meet their buying problems, get their money's worth in their purchases, develop and maintain an understanding of the forces affecting their interests as consumers. Consumers Union has no connection with any commercial

**CONSUMER REPORTS** each month gives comparative ratings of a variety of products based on tests and expert examinations, together with general buying guidance, information on medical and health questions, and news of happenings affecting the consumer's interests. The Reports is the manual of informed and efficient consumers the country over.

**THE BUYING GUIDE** (published as the December issue of the Reports) each year brings together information from all the preceding issues with new material and special buying advice. Pocket-size, 384 pages, with ratings of several thousand products, the Buying Guide is an invaluable shopping companion. Every member gets a copy of the Guide with his membership.

**BREAD & BUTTER** reports each week on new and predicted price and quality changes in consumer goods, interprets Washington legislation as it affects consumers, reports government regulations and actions on the consumer front.

**SUBSCRIPTION FEES** are \$4 a year, which includes subscription to the Reports and Buying Guide and Bread & Butter; \$3.50 without Bread & Butter (for foreign and Canadian memberships add 50¢). Reduced subscription rates are available for groups of 5 or more

interest and accepts no advertising; income is derived from the fees of members, each of whom has the right to vote for candidates to the Board of Directors. More than 70 educators, social workers and scientists sponsor Consumers Union and a national advisory committee of consumer leaders contributes to the formulation of policy (names of the members of the committee will be furnished on request).

(write for details). Library rates, for the Reports and Bread & Butter without the Buying Guide issue, are \$3.50; for the Reports alone, \$3.

Membership involves no obligation whatsoever on the part of the member beyond the payment of the subscription fee.

## You and Inflation

To any consumer who feels that the appointment of Chester Bowles to the position of Stabilization Administrator means a decisive victory over inflation, Consumers Union recommends a careful reading of the following paragraphs from Mr. Bowles' February 18th statement to the House Banking and Currency Committee:

"It would be difficult to exaggerate the gravity of the inflationary crisis we face. An expectancy of higher and still higher prices is sweeping the country. The speculative fever is reminiscent of 1929. We can see it in the stock market, in the real estate market, and even in almost every commodity market.

"Everywhere men are betting on inflation. Everywhere the inflationary pressures have reached explosive proportions. It should be obvious to any reasonable mind that only by the most vigorous action—action taken now—can we regain control.

"What is at stake is more than our reconversion program. What is at stake is our entire economic future. The answer to our present problems rests with you here in the Congress no less than with us in the executive branch of the government.

"In the next few weeks and months we shall be deciding whether we build a future of prosperity and security for all of us or whether we permit the present inflationary dynamite to go off in an explosion that will smash our economic system beyond hope of repair."

It is our opinion that it will take much more than the promotion of Mr. Bowles, or the excellent appointment of Paul Porter to succeed him as head of OPA, to prevent an inflationary explosion. President Truman himself lit the fuse when he gave the steel industry a price increase of \$5 a ton, despite Mr. Bowles' argument that \$2.50 a ton would compensate it for the 18½¢-an-hour wage increase to steel workers.

Furthermore, price increases are not being confined to steel and steel-using industries. As reported in *Bread & Butter*, about 5000 price increases have been allowed by OPA to various industries since V-J Day. Most such increases are in themselves relatively unimportant. But many of them open the way for new increases on other products, and together they exert a dangerous pressure on the price control structure.

Some of the increases arise from genuine necessity. But many are in the same class with the \$5-a-ton increase in steel. They are a response to the blackmail threat of "no price increase, no production." And it would be silly to expect an end to this kind of successful blackmail when the position of Reconversion Director—who has veto power over Mr. Bowles—is still held by John W. Snyder, who would, if he could, gladly give big business the shirt off your back.

But that does not mean that the explosion can't be stopped. It means only that it can't be stopped by Mr. Bowles. One man can't stop it, but millions of consumers—who are also voters—can, especially in an election year. There is good reason to believe that only the rising tide of consumer sentiment caused the elevation of Mr. Bowles. If consumers, instead of becoming complacent through feeling that Mr. Bowles can do it all, rise up in ever greater numbers to demand that the inflationary pressures be held firmly in check, they will be held in check until production does finally catch up with demand.

Many Consumers Union members ask what they individually can do to stop inflation. CU's best advice is

(Continued on page 82)

# Consumer Reports

"FACTS YOU NEED  
BEFORE YOU BUY"

"Because it was established for the very purpose of aiding families to buy wisely, to avoid waste and to maintain health and living standards, and because it is the largest technical organization providing such guidance, Consumers Union recognizes a special responsibility to the nation. In full awareness of that responsibility, we pledge ourselves to do everything in our power to help Americans as consumers make the greatest possible contribution to the national need."—FROM A RESOLUTION ADOPTED ON DECEMBER 10, 1941, BY THE DIRECTORS.

VOL. 11, NO. 3

MARCH 1946

## TECHNICAL SECTION

The Kaiser and the Frazer: A Preview of Two New Cars .....	60
Face Powders: A Cosmetics Expert's Evaluation of 65 Leading Brands .....	62
Small Radios: A Second Report on Six Table Models .....	65
Beer: Chemical and Taste Analyses of 35 Brands....	68
Garden Hobbies: Suggestions by CU's Gardening Consultant .....	70
Storage Batteries: A Preliminary Report.....	72
Rugs: Expert Advice on Their Care and Repair.....	73

## MEDICAL SECTION

Chemotherapy: Penicillin and Sulfa—Uses and Hazards .....	76
Your Child: A Psychiatrist's Advice to Parents.....	78
The RH Factor: What It Is and What It Means.....	80
Ex-Lax: Advertising Facts and Fancies.....	81

## NEWS AND INFORMATION

Compulsory Health Insurance: An Answer to Critics .....	82
CU Board Nominations .....	83

**DIRECTOR:** Arthur Kallet **EDITOR:** Madeline Ross  
**OFFICERS:** Colston E. Warne, *President*; Hartley Cross, *Vice-President*; Harold Aaron, *Secretary*; Bernard J. Reis, *Treasurer*.

**BOARD OF DIRECTORS:** Harold Aaron, Eleanor C. Anderson, Frank Beube, Hartley W. Cross, Osmond K. Fraenkel, Leland Gordon, Harry Grundfest, Jerome Hellerstein, Arthur Kallet, Paul J. Kern, Emmanuel Klein, Betty Medinz (staff representative), Edward Reich, Bernard J. Reis, Madeline Ross, Adelaide Schulkind, Colston Warne.

**STAFF ASSOCIATES:** Karl V. Amatneek (*Electrical Engineer*), Rissel Bonoff (*Senior Chemist*), Elizabeth B. Glaser (*Technical Director*), Florence Gluesing (*Librarian*), Dorothy Steele (*Office Manager*), Sidney Wang (*Head of Textile Division*), Jean L. Whitehill (*Administrative Assistant*).

**CORRESPONDENCE:** should be addressed to Consumers Union, 17 Union Square, NYC (3). CU regrets that time does not permit answers to inquiries for special information.

Consumer Reports is Prepared and Edited Under Union Conditions by Contract with Local 1 of the U.O.P.W.A.



# REPORTS ON PRODUCTS

TECHNICAL DIRECTOR: Elizabeth B. Glaser, Ph.D.

Ratings of products represent the best judgment of staff technicians or of consultants in university, governmental and private laboratories. Samples for test are in practically all cases obtained on the open market by CU's shoppers. Ratings are based on laboratory tests, carefully controlled use tests, the opinion of qualified authorities, the experience of a large number of persons, or on a combination of these factors. Even with vigorous tests, interpretation of findings is a matter on which expert opinion often differs. It is Consumers Union's pledge that opinions entering into its evaluations shall be as free from bias as it is possible to make them.

## Kaiser - Frazer Preview

*CU's auto consultant views these two new cars. The Frazer is "just another car," he reports, but the Kaiser promises something new in motor transportation*

You can write the *Frazer* off as just another car. Aside from its body, which has extra wide front and rear seats but will not seat four people comfortably on either of them, it is a thoroughly conventional automobile—it has a conventional engine the size of *Studebaker Commander* or *Ford 6*, the usual coil spring and cross-lever front suspension, everyday multi-leaf rear springs, the usual rear driving axle, and a separate frame and body. It contains no fancy engineering or special use of light metals.

### THE NEW KAISER

The *Kaiser* is something else again. It has front drive, unit body and frame torsion bar springing, independent rear wheel suspension, together with the same body dimensions and appearance as the *Frazer*. The *Frazer* is expected to sell for "around \$1200," the *Kaiser* at "about \$1000."

As *Kaiser* salesmen will hasten to tell you, all these novel features have been used in cars before. Actually, the *Kaiser* is the first American passenger car (though probably by a narrow margin) to use torsion bar springing. It is the first with independent (no axle) rear wheels, too, and the first passenger car in 30

or 40 years to transmit its power through two pairs of gears at all times instead of through one.

Rightly or wrongly, front drive has a poor reputation in this country (it was used on two *Cord* models), and at the *Kaiser-Frazer* preview the technical salesmen went over to the defensive at once, by claiming that

any front drive disadvantages had been overcome.

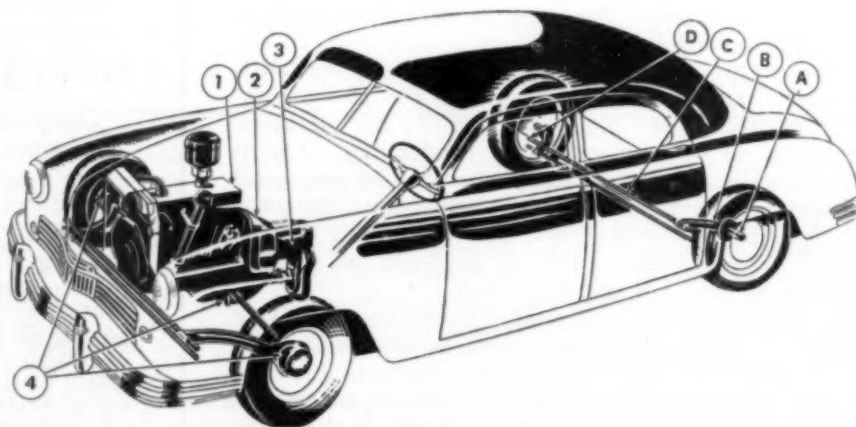
These disadvantages center around alleged lack of weight for traction on the driving wheels, particularly in starting, on upgrades and in accelerating. It is a fact that, other things being equal, the front drive does suffer in this respect. *Kaiser* engineers have attempted to offset this difficulty by piling the engine up on top—and partly in front—of what would ordinarily be the front axle. On the debit side, this results in a somewhat higher center of gravity (bad on turns) and the use of the above-mentioned extra pair of gears, which are used to get the power "back under" to the shafts that drive the wheels, the power thus taking a U-shaped path to the differential.

As soon as CU consultants can drive this car, full information on how the front drive affects stability, steering and parking will be presented.

### HARD ON THE TIRES

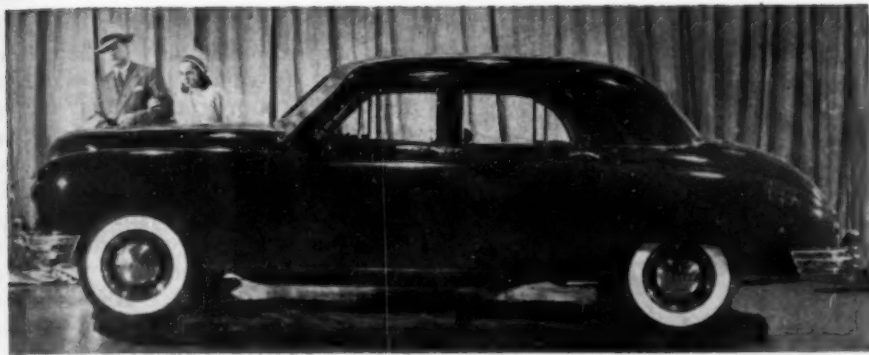
One definite minor handicap of any front drive is that it concentrates both steering wear and driving wear on the front tires. The *Kaiser* is slightly under-tired to begin with (if the preview statement as to its weight is correct) and unequal tire wear—as between front and rear wheels—will tend to make braking, as well as the tires' grip on the road, uneven.

Aside from the ability to take



CUTAWAY OF THE KAISER, to show how it works and wherein it is different from conventional design. The numbered parts are (1) engine; (2) clutch; (3) transmission; and (4) final drive assembly. The assembly is in a single unit, which can be lifted clear of the body and frame for servicing. The torsion spring suspension provides independent springing for each wheel through spindle (A), supporting arm (B) and torsion-bar spring (C), anchored at (D).





**THE FRAZER:** *It's nothing more nor less than a conventional car, selling for "about \$1200," with an engine about as large as that of the Ford 6 or the Studebaker Champion. Wait before you buy, CU advises.*

turns faster, which is usually put to the credit of the front drive, the main advantage is that it permits low, flat, unobstructed floors. In the *Kaiser* design, also, the whole power plant and front drive is said to be removable as a unit for overhauling.

#### **SPRINGS & WHEELS**

The principle of torsion bar springing is very simple. One end of a steel bar is rigidly attached to the chassis; the up-and-down movement of the wheel twists the rest of the bar, absorbing the bumps in this way instead of by compressing a spiral spring or bending a leaf spring. Other cars will undoubtedly carry this type of spring in the near future, as it is fairly simple and economical of material.

The independent suspension of the two rear wheels, which on the *Kaiser* have nothing to do but hold up the rear end of the car, lessens the unsprung weight, since there isn't any axle. This should help make the car ride easier; it almost certainly will ride very well indeed.

The *Kaiser's* combined body and frame is no novelty, similar construction having been used since 1936 by *Lincoln Zephyr* and since 1941 by *Nash*.

#### **WHAT MAKES THEM GO**

That extra pair of gears which, in the *Kaiser*, transmits the power from the rear of the transmission to a short "drive shaft" running forward under the engine, is just something that no engineer would use if he could avoid it. However dependable and quiet they may turn out to be, these gears represent a debit to the front drive idea.

The engines of both cars are built by Continental, a leading engine

builder, and they have no novel details. In size, the *Kaiser* engine is intermediate between the *Studebaker Champion-Nash 600* size and the "all three" class—its displacement is 187 cubic inches. Displacement of the *Frazer* engine is 226 cubic inches. Gas mileage will be roughly proportional to the engine size. Unless both cars are considerably lighter than was stated at the preview—which isn't likely—neither will be outstandingly powerful.

#### **BODY BEAUTIFUL**

Both cars use the same body shell, a four-door sedan design with no rear quarter-window. The rear window is large, the windshield over-slanted (bad from the optical and sun-glare standpoint) as in most "streamlined" cars. The body is built out to the extreme width of the car, allowing very wide front and rear seats. Over-all width of the car is, however, normal—just over six feet. The rear seat appears to be as wide

as the front, which is not the case in most cars.

Over-all length of both cars is the same, 197 inches, which is just above the average of the 1942 low-priced cars. This means that the *Frazer*, with its 123-inch wheelbase, overhangs very little, and that the *Kaiser*, with 117-inch wheelbase, overhangs at the front more than is usual, owing presumably to the front drive engine layout.

Three-speed transmissions, brakes, carburetion, cooling, and most minor details, as well as accessories, are conventional on both cars.

To sum up, unless the *Frazer's* stylish exterior conceals some engineering miracles, there is no reason for CU to recommend it in preference to such seasoned cars as, for instance, the *Studebaker Commander* or the *Pontiac*, with which it will apparently have to compete. The advanced features of the *Kaiser* present a different situation. The *Kaiser*, if road trial and further study show it to be soundly designed, has something to offer in exchange for the better-seasoned features of the standard cars. The *Kaiser* is going to do things in a different way, and anybody who intends to buy in or near the *Kaiser's* eventual price class should try it out, whether he buys it or not.

#### **FURTHER REPORTS COMING**

For those who find that they like the *Kaiser's* roominess, or its riding qualities, or the way it handles, CU will try later to strike a balance between any new standards of performance it sets and the basic standard of transportation rendered per dollar.



**THE KAISER:** *The insides are new and different, but whether they are better or worse than the old conventional design is a question that can be settled only after road tests have been made. The price: "around \$1000."*

# In the Powder Box . . .

price and quality don't always go hand in hand, CU found in its tests of 65 leading brands of face powder

"Sheer-gauge" and "film finish" may replace "air-spun" and "twin-hurricane" in the face powder ads, but whatever the appeal, face powder goes on year after year as America's most popular cosmetic. Even the range of fantastic color names—*Bridal Pink, Heirloom Lace Brunette, Sheer Dynamite, Havoc, Champagne Bisque, Castanet, Ibis*—fails to discourage glamour girls from the teen age to grandma's. It should be of some interest, therefore, to see what differences there are in price and quality among leading brands.

To this end, CU's cosmetics expert examined and rated 65 leading brands of face powder in terms of covering power, texture and apparent bulk density. Laboratory tests were made for the presence of excessive amounts of grit and starch. And weighings and calculations were made to find relative economy of the different brands.

## THE PRICE OF BEAUTY

There was a very great difference in price between the cheapest brand and the most expensive—*Hollywood*, at 25¢ for  $2\frac{3}{4}$  ounces (9.1¢ per oz.) and *Dermetics* at 75¢ for  $\frac{3}{4}$  ounce (\$1 per oz.). And *Dermetics*, the highest in price, landed in the "Not Acceptable" list as a result of its excessive grit content. Which illustrates once again an old-time CU tenet: You *don't* necessarily get what you pay for; high price is not an indication of high quality.

Sharing the "Not Acceptable" list with *Dermetics* were some other widely-known names: *Harriet Hubbard Ayer*, Richard Hudnut's *Gemey*, *Elizabeth Post* and *Irresistible*. All were rated down on the same count: excessive grit, resulting in rough texture.

Whether it's sold from the glamorous array of a Fifth Avenue *salon*

or from the jumble on the counter of the local 5-and-10, there's no reason why a face powder should contain excessive grit. Ordinary talc accounts for two-thirds to nine-tenths of the bulk of a box of face powder; the rest is made of white pigments such as titanium dioxide or zinc oxide for covering power plus "modifiers" such as kaolin, magnesium carbonate and zinc stearate for texture. Add a little color, a touch of perfume, mix well, and you have everything that goes into the average box of face powder but the "magic." This must be supplied by the famous name and the advertising copy writer.

## STARCH IN POWDER

Starch, historically the basis for face powder, is still added to some brands. Actually, this ingredient performs all the functions of the other ingredients (aside from color and perfume), though it does none of them particularly well. In the past, dermatologists regarded the presence of starch in face powder as a hazard, considering that it might do harm to the complexion. More recently, they have revised their opinions; the consensus is that the presence of starch, particularly in small amounts, is generally quite harmless. Some dermatologists believe, however, that powders containing large amounts of starch should be avoided, particularly by people having skin trouble.

For persons who may wish to avoid it, CU has indicated in the ratings those brands which contained small amounts of starch; those brands which contained substantial quantities are listed separately at the end of the "Acceptable" list.

What can you expect of a good face powder? It should spread easily and evenly over the skin (this property is referred to as "slip"), and produce a flattering shade which

does not become streaky in the course of wear. It cannot be expected to disguise a poor complexion, but it should hide tiny blemishes (that is, have good "covering power") without producing a chalky effect. It should be relatively free of sharp, gritty particles. Its perfume should not be displeasing, though this is a minor factor in face powders, as the only time the perfume is noticeable is at the time of application.

This is the ideal. Several brands deviated from it in one or more respects. The most prominent of the defections was the presence of grit in greater or lesser amounts. A really good powder should be practically free of such sharp particles, for too much grit, or grit which is too coarse, gives the powder a rough texture. Brands which contained excessive grit were rated "Not Acceptable."

## TRY THE "BITE TEST"

It is interesting to note in this connection that Lady Esther's famous "bite test" is one advertising stunt which really works. You *can* actually feel the presence of grit in a powder if you place a bit of it on the biting edge of a front tooth, and then bite against it with a rubbing motion.

Differences in covering power among the brands were not, in general, very great. None was found seriously deficient in this important characteristic. In fact, if anything, the covering power was too great in some of the powders; this would tend to give a rather hard, chalky appearance.

At one time, many brands were



*Hollywood* (left), rated "Acceptable" and cost 9.1¢ an ounce; "Not Acceptable" *Dermetics* (right), which cost \$1 an ounce, was found excessively gritty.



sold in two "weights," light and heavy; this is no longer true of leading brands. It was said that a "heavy" powder was more suitable for oily skins; a "light" powder for dry skins. Actually, the words heavy and light had nothing to do with the weight of the powder, but referred rather to its covering power: the heavier the powder, the greater its covering power. Experts now consider that weight—or more correctly, opacity—is entirely a matter of personal preference.

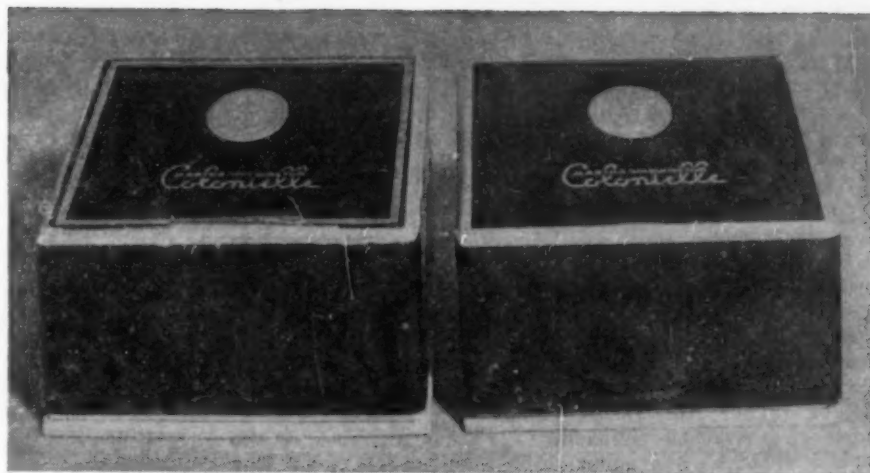
#### THE CHOICE OF COLOR

Color, one of the most important characteristics of a face powder, is at the same time the most confusing. As indicated earlier, the names applied to the various colors are by no means descriptive, and newer and more fantastic shade names appear as fast as imaginative copy writers can produce them. Nor do the relatively few standard color-names—*Rachel*, *Brunette*, *Natural*, *Flesh*—refer to standard colors. *Rachel* in Brand A may refer to a lightly-tinted beige, while Brand B's *Rachel* may be the color of a deep suntan. This situation is not simplified by the fact that the powder may look entirely different on the face than it did in the box. The only safe recommendation is that you try a small box (many brands are available in 10¢ "trial sizes") of the brand you select in the color that you think will do before you buy a large package.

"Large" and "economy" are, by the way, not necessarily synonymous. While the larger boxes did prove to be cheaper per ounce in most cases, CU found some exceptions. The \$1 box of *Woodbury* came to over 28¢ an ounce, while the 25¢ box cost only 20¢ an ounce; *Dorothy Gray's* \$2 box cost 40¢ for an ounce of powder, while the cost per ounce of the powder in the \$1 *Dorothy Gray* package was 36.4¢. But these were not the greatest of the price mysteries. Explain, if you can, why identical-looking boxes of *Martha Washington* powder, selling for \$1 each, should contain 1¾ ounces in one, and 3¾ ounces in the other. Or why one 89¢ box of *Avon* should contain 2½ ounces of powder while another, bought at the same time and for the same price, contained 1¾ ounces.

#### RATINGS

The ratings which follow were based on a series of tests which in-



**MYSTERY:** *Martha Washington Colonielle* (left), \$1 a box, contained 1¾ ounces of powder; *Martha Washington Colonielle* (right), \$1 a box, contained 3¾ ounces.

cluded consideration of covering power, smoothness and ease of application, appearance, texture, presence of starch and grit, and perfume. Where possible, objective laboratory tests were made; on factors which could not be measured objectively, the judgment of a cosmetics expert—who worked with samples whose identities he did not know at the time of test—were used. Two colors were tested in most brands. Comments refer specifically only to these colors, but because of the methods of production used for face powders, the comments are probably applicable to the entire line.

Brands are listed in order of increasing cost per ounce (figures in parentheses). Unless otherwise noted, prices are exclusive of 20% Federal tax. Italicized names show the colors tested.

Odor and covering power were found generally satisfactory; the ratings note brands which were found either outstandingly good or outstandingly bad with respect to these factors.

#### ACCEPTABLE

**Hollywood** (Howe Co., Seattle). 25¢ for 2¾ oz. (9.1¢). *Natural*; *Rachel*. Contained some grit. Available nationally.

**Embassy** (A. A. Vantine, NYC). 20¢ for 1¾ oz. (10.7¢). *Brunette*; *Rachel*. Contained some grit and traces of starch. Available nationally at Woolworth Stores.

**Roger & Gallet Poudre De Riz** (Roger & Gallet, NYC). 35¢ for 3 oz. (11.7¢). *Heliotrope-Naturelle*. Contained some grit and traces of starch. Covering power and adherence very good. Available nationally.

**Cashmere Bouquet** (Colgate-Palmolive-Peet Co., Jersey City). 45¢ for 3½ oz. (12.9¢). *Rachel* No. 2; *Peach*. *Rachel* No. 2 contained some grit. Available nationally.

**Wards Cat. No.—1360** (Montgomery Ward). 47¢ for 3 oz., tax included, plus postage (13¢). *Flesh Rachel*; *Rachel* 2. *Rachel* 2 contained some grit. Available by mail order.

**Lady Esther** (Lady Esther Ltd., Chicago). 39¢ for 2-7/10 oz. (14.5¢); 25¢ for 1-1/17 oz. (15.7¢). *Peach Rachel*; *Brunette*.

**April Showers** (Cheramy, NYC). 39¢ for 2½ oz. (15.6¢). *Rachel Moderne*; *Dark Brunette*. Contained traces of starch; *Rachel Moderne* contained some grit. Good, smooth texture. Available nationally.

**Larkin Gardenia** (Larkin Co., Buffalo). 35¢ for 2 oz. (17.5¢). *Natural*; *Brunette*. Contained some grit and traces of starch. Dry, rough texture. Available by mail order.

**House of Westmore** (House of Westmore, Hollywood). 50¢ for 2¾ oz. (18.2¢); 25¢ for 1¾ oz. (20¢). *Natural*; *Copper*. Chalky appearance. *Copper* contained some grit. Available nationally.

**Tayton's** (Tayton Co., Hollywood). 25¢ for 1½ oz. (18.8¢). *South Seas Brown*; *Rachel*. Contained some grit and traces of starch. Very good covering power. Available nationally.

**Hampden** (Hampden, NYC). 25¢ for 1¾ oz. (20¢). *Eggshell*; *Suntan*. *Suntan* contained some grit and traces of starch. Available nationally.

**L'Adonna** (Carrel, Ltd., Chicago). 50¢ for 2½ oz. (20¢); 50¢ for 2 oz. (25¢). *Rachel*. Two-ounce box contained some grit.

**Woodbury** (John H. Woodbury, Inc., Cincinnati). 25¢ for 1¾ oz. (20¢); \$1 for 3½ oz. (28.6¢). *Sun Peach*; *Rachel*. Available nationally.

CONTINUED NEXT PAGE



**Pond's** (Pond's Extract Co., NYC). 79¢ for 3.6 oz. (22¢); 43¢ for 2.1 oz. (20.5¢); 25¢ for 1.1 oz. (22.8¢). *Natural*; *Brunette*. Contained some grit. Available nationally.

**Park & Tilford** (Park & Tilford, NYC). 25¢ for 1½ oz. (21.2¢). *Light Rachel*; *Brunette*. Contained traces of starch; *Light Rachel* contained some grit and was very chalky. Very good covering power. Available nationally.

**Three Flowers** (Richard Hudnut, NYC). 75¢ for 3½ oz. (21.4¢). *Tropical*; *Peach*. Contained some grit. Available nationally.

**Bourjois Java** (Bourjois, NYC). 60¢ for 2¼ oz. (21.8¢). *Rose Indian*. Contained some grit. Available nationally.

**Marvelous** (Richard Hudnut). 55¢ for 2½ oz. (22¢). *Rachel No. 2*; *Naturelle*. *Rachel No. 2* contained some grit. Available nationally.

**Don Juan** (Don Juan Co., NYC). 25¢ for 1 oz. (25¢). *Beige*; *Rachel No. 2*. *Rachel No. 2* contained some grit. Available nationally.

**Vida-Ray** (Vita Ray Co., Jersey City). \$1 for 4 oz. (25¢). *Natural*; *Brunette*. *Brunette* contained traces of starch. Available nationally.

**Lady Marlow** (Lady Marlow, Hollywood). 79¢ for 3 oz. (26.3¢). *Rachelle No. 2*; *Naturelle*. Contained traces of starch; *Naturelle* contained some grit. *Rachelle No. 2* was found short weight. Available in California at Sontag Drug Stores.

**Jergens** (Andrew Jergens Co., Cincinnati). 70¢ for 2¾ oz. (26.6¢). *Peachbloom*; *Dark Rachel*. Contained traces of starch; *Peachbloom* contained some grit. Available nationally.

**Max Factor's** (Max Factor & Co., Hollywood). \$1 for 3¾ oz. (26.7¢). *Olive No. 2*; *Natural Rose*. *Olive No. 2* contained some grit. Available nationally.

**Martha Washington** (Anré, NYC). \$1 for *Pearl* (weight not stated), 3¾ oz. (26.7¢); \$1 for *Brun Soleil*, 1¾ oz. (57.2¢). Boxes appeared identical. Contained traces of starch.

**Mary Scott Rowland** (Mary Scott Rowland, Ltd., NYC). \$1 for 3½ oz. (28.6¢). *Mayfair-Light Rachel*; *Beverly-Rose Beige*. *Mayfair-Light Rachel* contained some grit. Available nationally.

**Duchess of York** (Prince Matchabelli, Inc., NYC). \$1.50 for 5¼ oz. (28.6¢). *Apricot*; *Naturelle*. Contained some grit. Very good covering power. Found short weight. Available nationally.

**Revlon** (Revlon, NYC). \$1 for 3½ oz. (28.6¢); 60¢ for 2 oz. (30¢). *Misty Coral*; *Sheer Dynamite*. *Sheer Dynamite* contained some grit. Available nationally.

**Filene's Own** (Wm. Filene's Sons Co., Boston). 59¢ for 2 oz. (29.5¢). *Red Plum*; *Rachel*. Available at Filene's Dep't Store, Boston.

**Princess Pat** (Princess Pat, Ltd., Chicago). \$1 for 3.3 oz. (30.3¢). *Flesh*. Very good covering power.

**Leon Laraine** (Carrel, Ltd.). \$1 for 3

oz. (33.3¢). *Rachel No. 1*; *Sensation*. *Rachel No. 1* contained some grit.

**Tangee** (George W. Luft Co., NYC). \$1 for 3 oz. (33.3¢). *Natural*; *Dark Rachel*. Available nationally.

**Chiffon** (Primrose House, NYC). \$1 for 2.82 oz. (35.4¢). *Beige*; *Rose Petal*. Very good covering power. Available nationally.

**Avon Medium Texture** (Avon Products, Inc., NYC). 89¢ for 2½ oz. (35.6¢); 89¢ for 1¾ oz. (50.9¢). *Dusk Rose*; *Rachel No. 2*. Two boxes purchased appeared to be of identical size; cartons in which boxes were packed were both labeled 1¾ oz.; one box was marked 1¾ oz. and one 2½ oz. Weights corresponded to labeled weights on boxes. *Dusk Rose* contained some grit. Available nationally through representatives.

**Dorothy Gray Portrait** (Dorothy Gray Ltd., NYC). \$1 for 2¾ oz. (36.4¢); \$2 for 5 oz. (40¢). *Rachel*; *Cream*. Contained traces of starch; *Cream* contained some grit. *Rachel* had poor, earthy odor. Available nationally.

**Mountain Heather** (Daggett & Ramsdell, NYC). \$1 for 2¾ oz. (36.4¢). *Brunette*; *Rachel*. Contained traces of starch. Available nationally.

**Coty "Air Spun"** (Coty, NYC). \$1 for 2.64 oz. (37.8¢). *Rachel No. 2*; *Rachel No. 1*. *Rachel No. 2* contained some grit. Available nationally.

**Evening in Paris** (Bourjois). \$1 for 2¾ oz. (38¢). *Naturelle*; *Rachel No. 2*. *Naturelle* contained some grit. Available nationally.

**Louis Philippe Poudre Incarnat** (House of Louis Philippe, Inc., Jersey City). 49¢ for 1¾ oz. (39.2¢). *Naturelle No.*

2; *Rachelle No. 1*, *Naturelle No. 2* contained some grit. Available nationally.

**Barbara Gould** (Barbara Gould, NYC). \$1 for 2½ oz. (40¢). *Naturelle*; *Rose Indian*. *Naturelle* contained some grit. Available nationally.

**Skylark** (Barbara Gould). \$1 for 2½ oz. (40¢). *Currant Rose*; *Rachel No. 2*. *Rachel No. 2* contained some grit. Available nationally.

**Lucien Lelong** (Lucien Lelong, NYC). \$2 for 5 oz. (40¢). *Havoc*; *Rose Rachel*. Contained some grit. *Rose Rachel* had very bad odor in jar, but fair odor on skin. Available nationally.

**Nosegay** (Dorothy Gray). \$2 for 5 oz. (40¢). *Glo Rachel*; *South American*. *South American* contained some grit. Available nationally.

**DuBarry** (Richard Hudnut). \$2 for 5 oz. (40¢); \$1 for 2 oz. (50¢). *Champagne Beige*; *Peach*. Contained some grit and traces of starch. Available nationally.

**Yardley "Bond Street"** (Yardley, NYC). \$1 for 2¼ oz. (44.5¢). *Golden Rachel*; *Rachel*. Available nationally.

**Almay** (Schieffelin & Co., NYC). \$1.10 for 2¼ oz. (49¢). *Light Rachel*; *Naturelle*. *Naturelle* contained traces of starch. Available nationally.

**Drezma** (Drezma, Inc., NYC). \$1 for 2 oz. (50¢). *Sun Tan*; *Special Blend*. Contained traces of starch; *Sun Tan* contained some grit. Available nationally.

**Helena Rubinstein Apple Blossom** (Helena Rubinstein, Inc., NYC). \$1 for 2 oz. (50¢). *Mauresque*; *Champagne Bisque*. Contained some grit. Available nationally.

**Lenthéric Tweed Soft-Focus** (Lenthéric, NYC). \$1 for 2 oz. (50¢). *Goldtone*; *Rachel*. Contained some grit. Smooth texture, very good covering power. Available nationally.

**Photo Finish** (Elmo Sales Corp., Philadelphia). \$1.50 for 3 oz. (50¢). *Brasil*; *Copper*. Available nationally.

**Beauty Counselor** (Beauty Counselors, Inc., Grosse Point, Mich.). \$1 for 2 oz. (50¢). *No. 1-A*; *No. 3-A*. Available by mail order.

**Translucid** (Houbigant, NYC). \$1.50 for 2½ oz. (60¢). *Sienna*; *Rachel*. Available nationally.

**Charles of the Ritz** (Charles of the Ritz, NYC). \$5 for 8 oz. (62.5¢); \$3 for 4 oz. (75¢); \$2 for 2½ oz. (80¢). Shades blended to order. Contained traces of starch; one box contained some grit. Available nationally.

**Jacqueline Cochran** (Jacqueline Cochran, Roselle, N. J.). \$3 for 4 oz. (75¢); \$1.75 for 2 oz. (87.5¢). *Rose Rachelle*; *Bisque*. Contained traces of starch. *Rose Rachelle* contained some grit. Available nationally.

The following brands are listed separately because they contained appreciable (3% or over) amounts of starch:

**Ann Barton Bridal Veil Cat. No.—4700** (Sears, Roebuck). 42¢ for 3 oz., tax

## Watch for . . .

Work on the following reports, among others, is either now under way or scheduled to begin soon:

**Electric Refrigerators**

**Radios**

**Radio-Phonographs**

**Vacuum Cleaners**

**Washing Machines**

**Pressure Cookers**

**Shaving Soaps & Creams**

**Talcum Powder**

**Dry & Cream Rouge**

**Hair Shampoos**

**Soap Substitutes**

**Flower Gardening**

**Maple Syrup**

included, postpaid (11.7¢). *Heirloom Lace-Brunette*; *Tulle Mist-Naturelle*. *Heirloom Lace-Brunette* contained some grit. Available by mail order.

*Adrienne* (Lorie Inc., Boston). 55¢ for 3¼ oz. (16.9¢). *Rachelle Olive*; *Blossom*. *Blossom* contained some grit.

*Betty Woods* (Betty Woods Labs, Los Angeles). 59¢ for 3 oz. (19.7¢). *Natural Flesh*; *Rachel #2*. *Rachel #2* contained some grit.

*Djer Kiss* (Kerkoff, Ltd., NYC). \$1 for 4 oz. (25¢). *Naturelle*; *Pêche*. Contained some grit. Available nationally.

*Cara Nome* (Langlois, Boston). \$2 for 4 oz. (50¢); \$1 for 1¾ oz. (57.2¢).

*Castanet*; *Rachelle Light*. *Rachelle Light* contained some grit.

*Elizabeth Arden Poudre d'Illusion* (Elizabeth Arden, NYC). \$3 for 5-13/16 oz. (51.6¢); \$1.75 for 2-15/16 oz. (59.5¢). *Light Rosetta Bronze*; *Mat Fonce*. Contained some grit.

*Guerlain Shalimar* (Guerlain, NYC). \$2 for 2½ oz. (80¢). *Ibis*; *Rachel*. Contained some grit.

#### NOT ACCEPTABLE

The following brands were rated "Not Acceptable" for the reasons stated:

*Irresistible* (Irresistible, Jersey City). 10¢ for 1½ oz. (7.5¢). *Flesh*; *Dark*

*Skin Tone*. Contained grit. Poor odor.

*Elizabeth Post* (Elizabeth Post, NYC). 25¢ for 3¼ oz. (8¢). *Deep Brunette*; *Natural*. Contained grit. Rough texture.

*Gemey* (Richard Hudnut). \$1 for 3¾ oz. (26.7¢). *Naturelle*; *Brunette* (*Rachel No. 1*). Contained grit. Dry, rough texture.

*Harriet Hubbard Ayer* (Harriet Hubbard Ayer). \$1 for 3.58 oz. (27.9¢). *Ayer Rose*; *Peach*. Contained grit. Harsh, sandy texture.

*Dermetics* (Dermetics, Inc., NYC). \$1.25 for 1½ oz. (83.4¢); 75¢ for ¾ oz. (\$1). *Brunette*; *Dark Suntan*. Contained grit.

## More Small Radios

*CU presents here its second report on new models of table radios, rating six additional brands and comparing them with the eight reported on previously*

This is the second installment of CU's test report on postwar radios of leading brands. In the first, which appeared in the February *Reports*, CU rated eight small models which were available at that time. The present report covers six additional models which have been bought and tested since the appearance of the last article.

#### REPORT IN PARTS

CU regrets the necessity for presenting the ratings of radios in this piecemeal fashion. But the alternative would be to hold up all the ratings until every one of the leading brands had reached the market—probably a matter of months. Instead of this, we are presenting information month by month, just as quickly as the radios can be bought and put through the laboratory, and enlarging our lists as additional brands become available.

To avoid repetition insofar as possible, detailed explanations on methods of test, rating techniques and other material which were published in the first article will not be repeated; the reader is advised to refer for these details to the February *Reports*. Ratings will include, in the proper order, both the newly-tested radios and those previously reported, but specific details will be given only on new models plus some which were tested earlier and found outstanding.

It should be noted in this connection that the term "Best Buy" is a

somewhat flexible one, referring to the best value for the money among the brands tested to date. Thus, a radio which appeared to be the "Best Buy" at an early stage of the test series may be dropped from this category as better and cheaper mod-

els become available.

We trust this method of procedure will prove satisfactory; we are using it so that members who wish to buy a radio at any particular time may take advantage of all the test data available up to that time.

### Definition of Terms

**TONE OR FIDELITY** refers to the ability of the radio to reproduce faithfully the tones broadcast. "High- or low-frequency cut-off" is the tendency to cut off tones in the upper or lower registers; "frequency discrimination" is the overemphasis of tones in a particular register.

**DISTORTION** is the creation of new overtones which result in a false rendition of the original tones.

**LOUDNESS OR VOLUME** refers to the maximum intensity which the radio can produce without excessive distortion.

**SENSITIVITY** is the set's ability to pick up weak or distant stations. The relative sensitivity of a set (in relation to other sets) in some cases depends on whether the loop antenna or an outside antenna is used.

"BIRDIES" are the variable-pitch whistles which some sets emit

when they are tuned from station to station.

**TELEGRAPH SIGNAL INTERFERENCE** is the dot-dash interference which affects some super-heterodyne radios more than others.

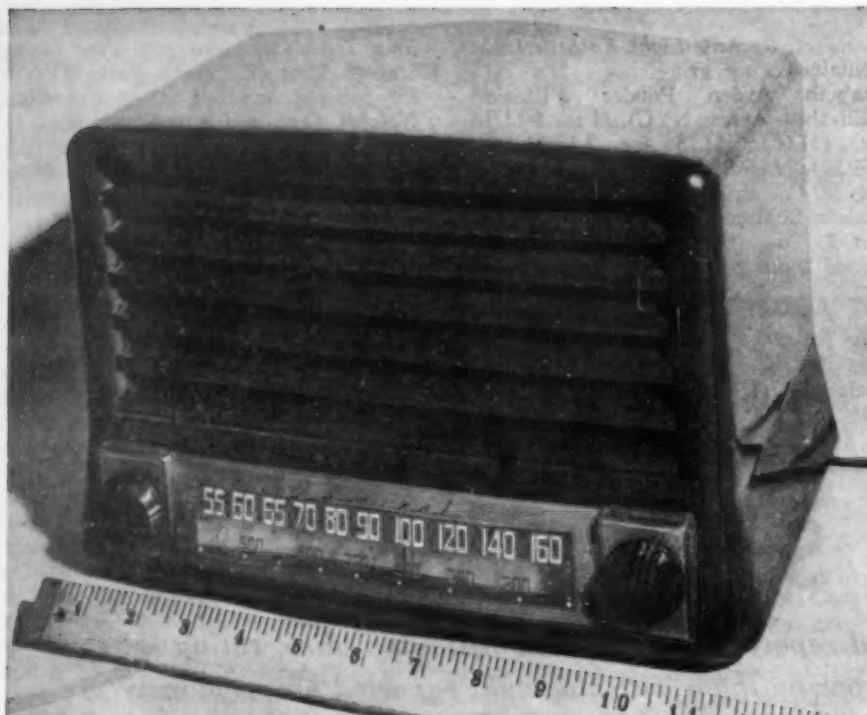
**ADJACENT CHANNEL INTERFERENCE** results from the inability of the radio to cut out one of a pair of stations of nearly the same wavelength, so that two stations are heard simultaneously.

**SHORT CIRCUIT HAZARD** indicates the possibility of a short circuit in the electric wiring if certain exposed parts of the radio are grounded.

**SHOCK HAZARD** indicates that there is a possibility of getting a more or less severe electric shock if a person touches exposed parts of the radio under certain conditions.

**TONE CONTROL** is a knob which permits the adjustment of the relative amounts of treble or bass received.



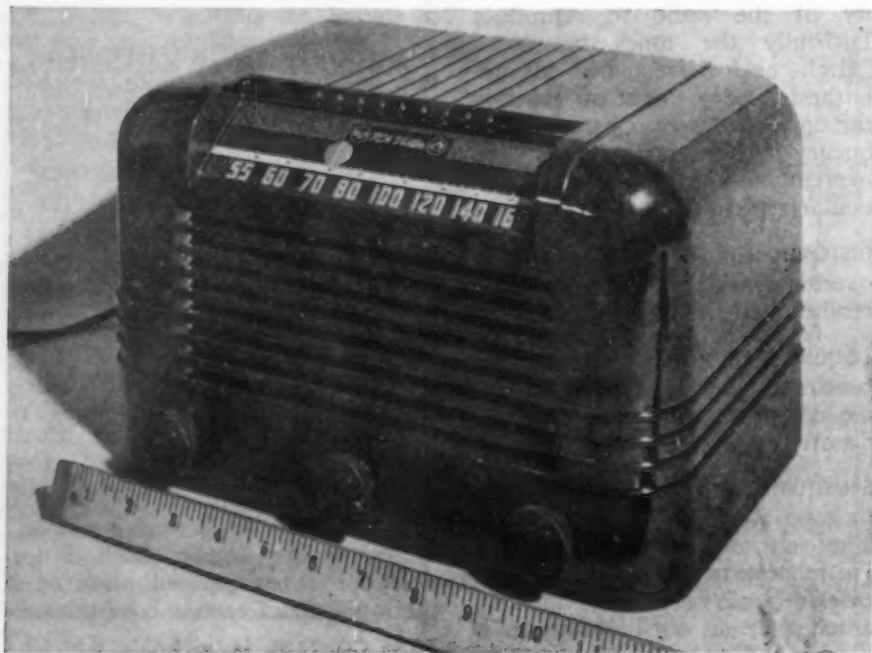


THE "BEST BUY" ADMIRAL: selling for \$27.95, tests showed it to have good tone and volume, excellent sensitivity.

No better radios have yet passed through CU's testing laboratory than the \$45.50 *Motorola* 65T21 which headed the "Acceptable" list last month, but a couple of new "Best Buys" have been added. Outstanding is the *Admiral* 6T01-6A1 which, at \$27.95, is just below the *Motorola*

65T21 in the quality ratings. The smaller *Motorola* (Model 65X11, \$26), last month's "Best Buy," retains its place on the list. A third "Best Buy" is the *RCA* 56X selling at \$24.10 and relatively high in quality.

At this writing, no large radios or



THE "BEST BUY" RCA: not quite as good as the *Admiral* (above), but still all-around satisfactory and priced at \$24.10.

#### ORDER OF QUALITY

In the following table, various characteristics, defined on the previous page, are numbered in order of quality relative to the several radios. A rating of "1" with regard to any factor means that the brand is the best of those tested with regard to that factor. Where two brands are given equal scores, they were found to be about equally good.

Brand	Tone	Volume	Sensitivity	—aerial	Sensitivity	—loop	"Birdie"	Telegraph	Interference	Adjacent-channel	Interference
<i>Motorola</i> 65T21	1	1	1	2	3	2	3				
<i>Admiral</i> 6T01-6A1	2	2	1	1	2	2	4				
<i>Motorola</i> 65X11	2	3	3	2	1	1	1				
<i>Admiral</i> 6T04-5B1	3	1	4	4	3	3	4				
<i>RCA</i> 56X	3	2	1	2	4	2	3				
<i>Pilot</i> B-3	3	4	2	3	2	2	1				
<i>Pilot</i> T-3	3	3	2	1	2	3	2				
<i>Temple</i> E-514-M	3	2	2	4	4	2	5				
<i>Silvertone</i> 6051	3	4	3	4	1	3	4				
<i>Emerson</i> 502	2	2	4	4	5	2	5				
<i>Emerson</i> 507	2	2	5	5	5	3	6				
<i>Stromberg-Carlson</i> 1100-H	4	4	5	3	5	2	6				
<i>GE</i> 100	4	1	3	3	3	2	2				
<i>Bendix</i> 0526A	4	2	4	5	4	3	6				

combinations are yet available in any brand, but as we go to press several small radio-phonograph combinations have reached the laboratory. These, plus several more table radios, are now going through the testing processes. Reports on them will be published in a forthcoming issue.

Prices given in the ratings are OPA Zone I (Eastern U.S.) ceilings. On the models tested, Zone II (Western U.S.) prices were about 5% higher.

#### BEST BUYS

The following were judged to offer the best values for the money in the order given:

**Admiral 6T01-6A1** (*Admiral Corp.*, Chicago). \$27.95. Six tubes including rectifier. Small table radio (9"h. x 12"w. x 7"dp.) in brown plastic cabinet. Relatively good tone and volume; excellent sensitivity; excellent automatic volume control; fair rejection of interference. Dial relatively hard to read, with poor calibration. An interesting radio from the engineering viewpoint, in that it actually achieves three-gang tuning by means of a two-gang tuning condenser coupled with a tuning coil. Note that this six-tube *Ad-*



*miral* is priced lower than the five-tube *Admiral* 6T04-5B1, below.

**Motorola 65X11** [see February Reports] (Galvin Mfg. Corp., Chicago). \$26. Six tubes including rectifier. Large midget radio (8"h. x 12"w. x 7"dp.) in brown plastic cabinet. Relatively good tone, volume and sensitivity; excellent rejection of interference. No short circuit hazard, but slight shock hazard.

**RCA 56X** (RCA Mfg. Co., Camden, N. J.). \$24.10. Six tubes including rectifier. Large midget radio (8"h. x 12"w. x 7"dp.) in brown plastic cabinet. Fairly good tone; good volume and sensitivity. Fairly good rejection of interference. Treble control switch. No shock hazard; Underwriters' approved.

#### ACCEPTABLE

(In estimated order of over-all quality)

**Motorola 65T21** [see February Reports] (Galvin Mfg. Corp.). \$45.50. Six tubes including rectifier. Table radio (10"h. x 18"w. x 10"dp.) in wood cabinet. A-c only. Excellent tone, volume and sensitivity; fair interference rejection. No shock or short circuit hazard. Good combination bass-and-treble tone control; short wave band.

**Admiral 6T01-6A1**. \$27.95 (see "Best Buys").

**Motorola 65X11**. \$26 (see "Best Buys").

**Admiral 6T04-5B1** (Admiral Corp.). \$34.95. Five tubes including rectifier. Small table radio (9"h. x 14"w. x 7"dp.) in wood cabinet. Fairly good tone; excellent volume; fair sensitivity and rejection of interference. Dial rather hard to read. No short circuit hazard, but slight shock hazard.

**RCA 56X**. \$24.10 (see "Best Buys").

**Pilot B-3**. \$35.35. (See February Reports).

**Pilot T-3**. \$44.40 (see February Reports).

**Temple E-514-M**. \$29.95 (see February Reports).

**Silvertone 6051**. \$29.45 (see February Reports).

**Emerson 502**. \$35 (see February Reports).

**Emerson 507**. \$20 (see February Reports).

**Stromberg-Carlson 1100-H** (Stromberg-Carlson Co., Rochester, N. Y.). \$31.95. Six tubes including rectifier. Small table radio (8"h. x 14"w. x 8"dp.) in brown-and-cream plastic cabinet. Relatively poor tone; fair volume, sensitivity and rejection of interference. Good volume control. Treble control switch. Very slight shock hazard; no short circuit hazard.

**General Electric 100** (General Electric, Bridgeport, Conn.). \$29.30. Five tubes including rectifier. Large midget radio (8"h. x 12"w. x 7"dp.) in brown plastic cabinet. Relatively poor, boomy tone; excellent volume; fairly good sensitivity and rejection of interference. Dial relatively hard to read. No short circuit hazard but slight shock hazard; Underwriters' approved.

## Sear's Silvertone: the \$8.88 midget



Received too late for inclusion in the regular ratings, the midget Sear's *Silvertone* deserves special mention as the first postwar radio to be sold at less than \$10. The *Silvertone*, sold by Sears, Roebuck as Cat. No.—6002 for \$8.88 plus postage, is a real midget radio (4"h. x 6"w. x 4"dp.). Despite the fact that, relative to the other radios tested, it has only fair tone and comparatively low volume and sensitivity, it is unquestionably a "Best Buy" for those who want an extra radio for tuning in on local stations, provided interference in the locality is not very strong.

A full report on the *Silvertone* will be presented in the April Reports.

**Bendix 0526A** (Bendix Aviation Corp., Baltimore). \$22.95. Large midget radio (7"h. x 11"w. x 7"dp.) in brown plastic cabinet. Relatively poor tone; good volume, sensitivity and rejection of interference. Dial relatively hard to read and poorly calibrated; tendency to

stick on sample tested. Police band. No short-circuit hazard but slight shock hazard. Unique and well-designed cabinet, fitting over inside mechanism, making inside mechanism easily accessible for servicing or tube testing.

## Percentage of DDT: a correction

In calculating the percentage of DDT—or any other solid substance—in a liquid solution, several methods of measurement are in common use:

- (1) Weight of solid substance (in this case, DDT) in a given volume of solution;
- (2) Weight of solid substance in a given weight of solution;
- (3) Weight of solid substance in a given volume or weight of solvent.

Percentages of DDT reported in CU's article on 14 brands of DDT spray (*Consumer Reports*, October 1945) were based on method (1), using the weight of DDT in 100 cubic centimeters of the DDT spray. This method of calculation is one that has been used by the U. S. Department of Agriculture's Bureau of Plant Entomology and Plant Quarantine in reporting the percentage of DDT in spray emulsions.

It was brought to our attention that in the insecticide field common usage is to calculate percentages by method (2), the "weight by weight" system; in fact, according to government insecticide regulations, label percentages must be computed on this basis.

On this basis, taking into consideration the specific gravities of the DDT solutions, the percentages of DDT should be about one-fifth higher than reported; that is, "Acceptable" brands should have been reported as .5% to 1.2% higher in DDT content than given.

This change in computation does not affect the order of ratings, nor does it change the position of the brands in the "Not Acceptable" list, all of which contained less than 2½% DDT by weight. With the new method of calculation, however, the following brands originally reported as mislabeled, did meet the DDT content claims on their labels: *Ultra Insect Spray* (5%); *Nosect Super Grade AA* (5%); *Darah DDT* (3%); *Miracle DDT Insecticide* (3%). CU regrets the error which led to the original report.

# BEER

*A report on 35 widely-sold brands of bottled beer, based on chemical analyses and expert evaluation of flavor.*

If you're a seasoned beer drinker, devoted to one brand and convinced that no other can touch it, this report is not for you. If you turn the page, you're likely to find that our experts' tastes don't agree with yours, and you'll argue hotly that the experts don't know what they're talking about. Let us phrase the argument a little differently, so that we can agree: If, having tried various brands, you have found one that satisfies you, then that one is the best beer—for you. For "good" in beer—as in clam chowder or women's hats—is what you like.

But not everyone has hit upon the beer of his choice. There's the host or hostess, who, having decided to serve beer, wanders down to the grocery store and is lost in the array of brands. There's the shopper who connects the name of the beer with that of his favorite radio comedian, rather than with an attitude toward the product itself. There's the casual beer drinker who never can remember from one time to the next which brand it was he liked last time, and therefore makes another random selection. And there's the person who drinks one brand religiously, never knowing whether he wouldn't like another even more. These may find the advice of our experts, based on both laboratory and taste tests of 35 widely sold brands of beer, of some help.

## BEER TYPES

Ordinary beer is of two types: Pilsen, which is rather bitter, and Munich beer, which is rather sweet. Indications on the bottle, such as "light," "white label," "yellow label," "blue label," "black label," "gold label," "pale," "dry," etc., have little significance except to identify a particular brand.

Much has been said regarding the superiority of one location over another for purposes of beer production. In the past, this tradition had more basis in fact than it has now. Differences in the mineral content of

water and in climatic conditions made it impossible to duplicate in San Francisco a beer which was made successfully in Milwaukee. But chemical analysis and air conditioning have combined to eliminate such difficulties, and it is now quite possible to reproduce Milwaukee's water and the climate of Milwaukee's breweries anywhere. And the brewer in Milwaukee can, if he's so inclined, add a pinch of mineral here and

there, up his thermostat a couple of degrees, and end up with beer which was once typical of San Francisco.

Beer-making is, however, a complex and highly technical process, and minor variations at almost any stage of production may make a big difference in the finished product. Basically, the process consists of treating malted grain (grain which has been steeped in water and allowed to germinate) with hot water to produce a "wort" or extract, boiling this with hops, fermenting with yeast, then clarifying and bottling or kegging.

Many specifics of the various steps are closely-guarded secrets in each brewery: the types and proportions of the various grains used, the degree of malting, the mineral content of the water, the particular strain of yeast, etc. And, just as no two housewives produce the same vegetable soup, so the end products which come from the different breweries may bear only a generic resemblance to one another.

## QUALITY CONTROL

How, then, is it possible to measure quality in a product so flexible? Again, perhaps a parallel gives the best illustration. You may or may not like the necktie that John Jones is wearing. But certain objective yardsticks may be applied to find out whether it is a good tie: the fabric it is made of, the weave, the construction, the quality of the workmanship, the material of the lining. With beer these objective tests—the factors which determine quality aside from taste—are, for the most part, chemical. They include percentage of extract, degree of fermentation, alcohol content, acidity, amount and stability of the "head," retention of carbonation, etc. Flavors were considered, not in terms of "like" or "dislike," but rather in terms of whether or not they were considered by an expert as good for their own particular type. It was on the basis of these factors that CU's ratings of beer were made.

## CU BUYS BEER

The 35 brand names you see in the beer ratings are the result of some carefully-planned shopping—as are the brand selections in all of CU's tests.

In the case of beer, samples of three nationally-sold brands were first bought in twelve different cities, and subjected to test, to determine uniformity within each brand. On the basis of these preliminary tests, it was decided to purchase 35 brands, each brand to be bought in at least four different localities, three bottles in each locality. Taste tests were to be done on each individual sample; chemical tests on a composite of the twelve samples unless the taste tests indicated lack of uniformity, in which case the samples were to be analyzed individually.

To select the 35 brands, CU first obtained from the industry lists of the brewers who produced the largest beer volume, and the brands they sold. These lists were then sent to CU shoppers in 25 cities; with the request that they survey the market, to find which of the brands were available in their own localities.

When the surveys were sent in and tabulated, CU's purchasing department sent out orders to its shoppers throughout the country to purchase the brands listed in the ratings.



## BEER AND CALORIES

Tradition has it that the beer drinker is a rotund—and happy—gentleman. But the fact is that beer is not, of itself, particularly fattening, containing about 100 calories to the 8-ounce glass—about two-thirds as much as the same amount of milk. Beer—like other calorie-containing products—is fattening only to the extent that it is consumed in excessive amounts as a supplement to the normal caloric intake. The person who drinks glass after glass of beer may expect to gain weight just as surely as the person who doesn't know when to stop when faced with a box of candy.

## BOTTLE VS. CAN

The controversy of bottled beer versus canned, gotten off to a fine start soon after the repeal of prohibition when the canning industry decided to invade the field, was temporarily halted by wartime metal shortages. But with cans for civilian use back in the picture, the fight may be expected to return to full swing.

Actually, it would appear to be a losing fight for the bottle makers. For, despite all the nasty words they hurled at the metal-packed product, the fact was that vast numbers of beer buyers found comfort in the fact that they could throw the tin cans into the garbage pail, rather than having to save the empty containers and return them to the store for a refund of their deposits. The beer in tins had other advantages: the tin was lighter to carry, was unbreakable, took up less storage space, and was easier to cool than beer in bottles. And the protective coating applied to the insides of the cans was successful in keeping the beer out of contact with the metal, so that no unpleasant flavors were imparted to the product.

## BEER CONSUMPTION

The Mason & Dixon line would appear, from the statistics, to divide the beer-drinking habits of the American population. According to 1943 industry statistics, Alabama, Mississippi, Georgia, Arkansas, North Carolina, South Carolina and Tennessee show the lowest beer consumption, with total consumption ranging from 3.6 gallons (about 58 glasses) to 8.2 gallons (131 glasses) per person per year. Nevada leads the country in beer consumption (25.4 gallons or 406 glasses per person per year), closely followed by

West Virginia, Rhode Island, Michigan, New Jersey, Maryland, New York and Pennsylvania, all of which have per capita beer consumptions of something over a glass per person per day.

The Federal Alcohol Administration has a suggested list of label requirements for beer, but the individual States may use these or not, as they desire. To date, fewer than half of the States have adopted the recommendations of FAA, and the labeling laws, consequently, vary considerably from one place to another. The result is that in some States, rigid label laws are enforced; in others, producers may say as little or as much as they choose on their beer labels.

## FIRST AND SECOND COUSINS

Aside from beer, there are several other malted beverages somewhat similar to it:

**ALE**, beer's closest relative, is produced by a somewhat different fermentation process, and the resultant brew is generally lighter in body, somewhat more bitter, and higher in alcohol content than beer.

**PORTER** is a dark, heavy ale.

**STOUT** is similar to porter, but still darker and heavier.

**BOCK BEER** is brewed in Winter for early Spring consumption. It is somewhat heavier and higher in alcohol content than ordinary beer.



—Photo Acme

**RIGID CONTROL** is needed to produce beer which is uniform in quality. Here a brewer tests a sample from the kettle.

**SAKE** is the Japanese cousin to beer, produced from rice.

**PULQUE** is the name applied to a beer-like beverage produced in Mexico and in some South and Central American countries. It is made by fermentation of the sap of the Agave (century plant).

Only bottled beer was included in CU's tests. The ratings are based partly on the chemical tests described above, and partly on expert opinion as to flavor.

Ratings are in alphabetical order within each group. Prices given are the average paid for a 12 fl. oz. bottle unless otherwise noted. Alcohol content is given in percent by volume.

## ACCEPTABLE

### EXCELLENT

**Barbarossa** (Red Top Brewing Co., Cincinnati). 17¢. Very good, bitter flavor with good bouquet; excellent head. Contained 5.4% alcohol.

**Falstaff** (Falstaff Brewing Corp., Omaha). 11¢. Excellent, moderately bitter flavor; excellent head. Contained 5.9% alcohol.

**High Life** (Miller Brewing Co., Milwaukee). 20¢. Very good, sweet flavor; excellent head. Contained 5.7% alcohol.

**Piel's Extra Premium Pilsner Beer** (Piel Bros., NYC). 11¢. Excellent flavor, mild, dry and brisk; excellent head. Contained 5.7% alcohol.

**Rheingold Extra Dry Lager Beer** (Liebmann Breweries Inc., NYC). 11¢. Very good, mildly bitter flavor; excellent head. Contained 6.1% alcohol. Not the same as Rheingold, brewed by U.S. Brewing Co., below.

**Stroh's Bohemian Style Beer** (Stroh Brewery Co., Detroit). 11¢. Excellent, bitter flavor; excellent head. Contained 6.4% alcohol.

### GOOD

**Acme** (Acme Breweries, San Francisco). 12¢ for 11 fl. oz. Good, sweet average flavor; very good head. Contained 6.1% alcohol.

**Ballantine's Export Light Beer** (P. Ballantine & Sons, Newark, N. J.). 14¢; 36¢ for 1 qt. Very good, draught-type flavor; good head. Contained 6.7% alcohol.

**Blatz Pilsener Beer, blue label** (Blatz Brewing Co., Milwaukee). 25¢. Fair, very sweet flavor; good head. Contained 5.4% alcohol.

**Blatz Pilsener Beer, white label** (Blatz Brewing Co.). 22¢. Good, sweet flavor; good, frothy head. Contained 5.7% alcohol.

**Budweiser Lager Beer** (Anheuser Busch, Inc., St. Louis). 15¢. Very good, dry flavor; good head. Contained 6.4% alcohol.

CONTINUED NEXT PAGE



**Carling's Black Label** (Brewing Corporation of America, Cleveland). 14¢. Very good, mild, brisk flavor; good head. Contained 5.4% alcohol.

**Duquesne Pilsener** (Duquesne Brewing Company, Pittsburgh). 14¢. Fairly good, sweet, mild flavor with fair body; very good head. Contained 4.8% to 5.6% alcohol.

**Eastside Lager** (Los Angeles Brewing Co., Los Angeles). 13¢ for 11 fl. oz. Fairly good, mild, dry flavor; good head. Contained 4.9% alcohol.

**Goebel Gold Label** (Goebel Brewing Co., Detroit). 11¢. Fair, mildly sweet flavor; very good head. Contained 4.9% alcohol.

**Hamm's Preferred Stock** (Theo. Hamm Brewing Co., St. Paul). 14¢. Good, slightly bitter, draught-type flavor; good head. Contained 6.1% alcohol.

**Hudepohl Pure Lager** (Hudepohl Brewing Co., Cincinnati). 11¢. Fair, mildly sweet, gassy flavor; good head. Contained 5.4% alcohol.

**Iron City Lager** (Pittsburgh Brewing Co., Pittsburgh). 14¢. Very good, sweet, brisk flavor with good body; very good head. Contained 4.3% to 5.4% alcohol.

**Lucky Lager** (General Brewing Corp., San Francisco). 12¢ for 11 fl. oz. Good, mild flavor; good head. Contained 5.4% alcohol.

**Pabst Blue Ribbon** (Pabst Brewing Co., Peoria Heights, Ill.). 17¢; 31¢ for 1 qt. Good, sweet flavor; good head. Contained 5.7% alcohol.

**Rainier Club Extra Pale** (Rainier Brewing Co., San Francisco). 12¢ for 11 fl. oz. Labeled as containing alcohol "not over 4% by weight." Good, average flavor; good head. Contained 5% alcohol. Not the same as **Rainier** with no alcohol content stated, below.

**Rheingold** (United States Brewing Co., Chicago). 23¢. Very good, sweet flavor; very good head. Contained 6.1% alcohol. Not the same as **Rheingold**, brewed by Liebmann Breweries, above.

**Ruppert Knickerbocker Beer** (Jacob Ruppert, NYC). 11¢. Very good, sweet flavor; fair head. Contained 5.1% to 5.7% alcohol.

**Schaefer Light Beer** (F. & M. Schaefer Brewing Co., NYC). 11¢. Good, bitter (hops) flavor; very good head. Contained 5.4% alcohol.

**Schlitz** (Jos. Schlitz Brewing Co., Milwaukee). 14¢. Very good, dry, bitter flavor; very good head. Contained 4.1% to 5.4% alcohol.

**Schmidt's City Club** (Jacob Schmidt Brewing Co., St. Paul). 15¢. Fairly good flavor; fair head. Contained 5.4% alcohol. Not the same as **Schmidt's Light Beer** or **Schmidt's City Club Select**, below.

**Trommer's White Label** (John F. Trommer, Inc., Orange, N. J. and Brooklyn). 13¢. Very good, sweet, brisk flavor with good aroma; very good head. Contained 5.4% alcohol.

#### FAIR

**Hoffman** (Hoffman Beverage Co., Newark, N. J.). 11¢; 27¢ for 1 qt. Good, sweet, malty flavor; fair head. Somewhat variable. Contained 4.3% alcohol.

**Krueger Finest Beer** (G. Krueger Brewing Co., Newark, N. J.). 11¢. Fair, bitter-sweet flavor; excellent head. Contained 4.4% alcohol.

**Rainier Club Extra Pale** (Rainier Brewing Co.). 12¢ for 11 fl. oz. No label statement of alcohol content. Fair, average flavor; poor head. Contained 3.7% alcohol. Not the same as **Rainier**, labeled "not over 4% alcohol," above.

**Schmidt's Light Beer** (C. Schmidt & Sons, Inc., Philadelphia). 29¢ for 1 qt. Fairly good, average flavor; fair head. Contained 4.9% alcohol. Not the same as **Schmidt's City Club**, above, or **Schmidt's City Club Select**, below.

**Trommer's Light Malt Beer, Yellow Label** (John F. Trommer, Inc.). 11¢.

Good, but rather weak, dry flavor; fair head. Contained 2.8% alcohol.

**R & H Light Beer** (Rubsam & Horrmann Brewing Co., Staten Island, N. Y.). 11¢. Flavor "young" and highly variable; head variable from good to poor. Slight sediment in bottles. Contained 4.1% to 5.4% alcohol.

#### POOR

**Schmidt's City Club Select** (Jacob Schmidt Brewing Co.). 9¢. Fair but weak, malty, sweetish flavor; very good head. Contained less than 1% alcohol. This may be satisfactory as a "near-beer," but both flavor and body were flat as a result of the alcohol elimination.

**Silver Fox Deluxe** (Peter Fox Brewing Co., Chicago). 16¢. Fair, sweetish watery flavor; good head. Contained 3.1% alcohol.

## Gardening as a Hobby

*CU's gardening consultant offers some pointers to those having the space, time and inclination to take on new garden hobbies*

What will become of the Victory gardens across the nation? Some will return to grass and weeds, some to flowers, and some will continue to supply the family with fresh vegetables. Though not everyone is like the man who enjoyed wartime gardening so much that he has bought a farm, many people did like their first venture at gardening so much that they want to continue it, but with a peace-time accent on pleasure as well as on food.

You may wish to make a hobby of your garden this year. Garden hobbies are many, and they appeal to a great variety of interests, from esthetic to scientific. A few are discussed here for your consideration.

#### GRAPES AND WINES

"Grapes and Wines," a recent book by U. P. Hedrick, costing \$3.50, suggests a doubleheaded hobby for the man of the family. Grapes are generally easy to grow, though you can find difficulties if you like them. If you want to do it the hard way, you might, for example, try growing Black Hamburg grapes outdoors, as

one Massachusetts amateur does. (The trick here is to lay the vines down and bury them for the Winter.)

#### HERBS

Herb gardening has been so popular that a brief mention will be enough. This is a triple-headed hobby. After growing the herbs you might go on to herb cookery. And if you are not content with a mere herb patch, you can go on to the design of a herb garden, a project which can lead to much delving into old and new books for ideas. Many herbs positively like poor soil, which may make herb gardening just the right choice for you.

#### References:

"*Herbs, How to Grow Them and How to Use Them*," by Helen Noyes Webster. Rev. ed. Ralph T. Hale and Co., Boston. \$1.50.

"*Herbs, Their Culture and Uses*," by Rosetta E. Clarkson. MacMillan Co., N. Y. \$2.75.

"*The Home Growing of Twelve Condiment Herbs*." Pamphlet. Herb

Society of America, Horticulture Hall, Boston. 25¢.

"Some Sources of Herb Seeds, Plants and Dried Products." Pamphlet. Herb Society of America. 5¢.

#### WILD FLOWERS

Have you considered a wild flower garden for your back yard? Nature will, of course, be your source for ideas, but wild flower exhibits at the flower shows are well worth studying as examples. If you can spare a strip twenty feet deep across the back of your lot, you can produce a polished imitation of nature with a few wild bushes, two or three small trees, a winding path bordered with wild flowers, and even a woodland pool if you are ambitious. But a much smaller space will hold a lot of wild flowers.

A great part of the fun is making trips to the country to collect the plants and seeds. Many kinds are easily transplanted even when they are in full bloom, provided you take plenty of damp earth with the roots, and provided the plants are shaded and carefully watered for some time afterward. But on the whole, Spring bloomers are best handled in the Fall, Summer and Fall bloomers in Spring. You will probably be most successful if you collect only flowers and plants that grow in large numbers. Don't rob the woods of rare wild flowers; they will probably fail in your garden anyway.

If you want rarities, they may be bought, in pots, from nurseries. Or you can grow them yourself from seed—a first-class hobby. Rex D. Pearce, of Moorestown, N. J., sells wild flower seed, but fresh seed that you collect yourself and sow at once (around the base of the parent plant or in finely pulverized soil at home) is likely to germinate better.

As a whole, wild flowers are not hard to grow, but a few are fussy as to soil reaction (acid, neutral, alkaline), so have your soil tested and make corrections before trying fussy kinds. Woodland wild flowers require a soil that is  $\frac{1}{4}$  to  $\frac{1}{2}$  humus (composted leaves and grass, or leaf-mold—not manure, even though well rotted). And don't use chemical fertilizers. A few wild flowers like it, but many others may be killed. Besides suitable soil and moisture, wild plants need the same exposure and the same degree of sun or shade they are used to in their natural environment.

## Grow Vegetables

Garden hobbies add to the pleasure of gardening. But it is still essential that your main emphasis remain on growing vegetables and fruit for the table and for canning.

Food supplies are much shorter this year than the experts earlier anticipated, and the dependence of other countries for relief supplies on the United States, if they are to avoid starvation, gives a greater responsibility to the home gardener.

CU members should consult back issues of the *Reports* as well as the *Buying Guide* for information on gardening and ratings of seed houses, fertilizers, etc. The following issues of the *Reports* should be consulted along with the gardening section of the *Buying Guide*:

**General** (planning, soil preparation, planting, etc.): April 1943; March 1945.

**Seeds** (sources of supply, treatment, varieties): April 1943; March 1945.

**Insecticides and Fungicides**: March 1944; May 1945.

**Fertilizers**: March 1944; July 1944.

**References** (Experiment Station bulletins, books, periodicals): April 1945.

**Fruit and Nursery Stock**: March 1944.

If you do not have copies of these back numbers, they may be obtained by writing to Consumers Union and enclosing 25¢ for each issue of the *Reports*.

Some good kinds to start with are: cardinal flower (buy), butterfly weed, wild columbine (*Aquilegia canadensis*)—all easy in any good garden soil near neutral in reaction; round leaf hepatica (*Hepatica triloba*), false Solomon seal, purple trillium, red and white baneberries (poisonous to eat), foam flower and downy yellow violet—all indifferent to soil reaction.

Probably the best source of native plants is Gardens of the Blue Ridge, E. C. Robbins, at Ashford, McDowell County, N. C.

#### References:

"The Wild Garden," by Margaret McKenny.

"Propagation of Wild Flowers," by Will C. Curtis. Bulletin, Horticulture, Horticulture Hall, Boston, Mass. 20¢.

There are few good wild flower

gardening books in print now, but public libraries are likely to have the following:

"Pioneering with Wildflowers," by George D. Aiken.

"Taming the Wildings," by Herbert Durand.

#### ROCK GARDENING

Rock gardens lost much of their popularity because of the banal ugliness of those rock-studded banks and heaps we used to see on every hand. Nevertheless, the culture of rock and alpine plants can be a fascinating hobby for those who have limited garden space. And no rockwork, as such, is required. Merely edging a raised bed with chosen rocks makes it possible to grow all kinds of delicate little plants.

CONTINUED NEXT PAGE



The correct approach is from the plant angle. Rocks are used only to imitate in physiological effect the conditions of the plant's original wild environment. There is a great range of material (witness Reginald Farrer's two fat volumes of descriptions), with widely differing problems of culture—enough to challenge the imagination and ability of anyone, and likely to keep him busy all Winter reading up on his subject, searching the catalogs and corresponding with like-minded enthusiasts.

Don't be scared away from any plant just because an English authority or someone in a different section of this country says it is difficult. Growing conditions vary so widely that what you can grow in your own garden is a matter of personal discovery. A great many plants and a lot of know-how can be put into a small space if your hobby is rock gardening.

Recommended sources of rock plants are: Mitchell Nurseries, Barre, Vt.; Carl Starker, Jennings' Lodge, Ore.; Wm. Borsch and Son, Inc., Maplewood, Ore.

#### References:

There seems to be only one book on rock gardening now available for sale, but that is a good one:

"*The Rock Garden*," by James H. Bissland. Can be bought from *Horticulture*, Horticulture Hall, Boston, 15, Mass. \$1.

Public libraries will probably have, in addition:

"*Rock Gardens*," by F. F. Rockwell (for beginners).

"*American Rock Gardens*," by Stephen F. Hamblin. This contains many useful lists.

"*Pleasures and Problems of My Rock Garden*," by Louise Beebe Wilder.

"*The English Rock Garden*," by Reginald Farrer. 2 vols. This book covers the world with its descriptions of rock plants; it is a classic.

For inspiration and help in rock-gardening, it may be a good idea to join the American Rock Garden Society, 57 Sandford Ave., Plainfield, N. J. Arthur H. Osmun is Secretary, and annual dues are \$3.50. A *Quarterly Bulletin* with illustrated articles goes to each member. The Society is divided into regional groups whose members meet at a monthly luncheon and hear illus-

trated lectures on rock gardening.

#### HARDY PLANTS

Collecting varieties of hardy plants is a hobby that offers endless variety and interest. The choice of a group to collect is partly a matter of personal choice, but also depends on the conditions of soil and site, the cultural requirements and the expense and labor involved. A logical beginning would be a group not too hard to grow, with flowers of special appeal, good color range, a rather long season of bloom and some variation in growth. Furthermore, they should be capable of improvement in several ways. Even with these restrictions, it is possible to produce all kinds of specialties, from petunias to peonies.

We suggest that, since garden work goes on for eight months while bloom from most groups lasts only one month or so, the succession-of-crops idea is more rewarding for most people than concentration on one group only. For example, bearded iris from dwarf to giant might be the main crop, but moss phlox (*Phlox subulata*), thyme, hemerocallis and chysanthemums would give bloom for the rest of the season. All these have many varieties and great possibilities for study and pleasure, from Spring to frost.

No sooner do the collections begin to take form than seedlings, self-sown or produced by crossbreeding, add greatly to the joy of the gardener and the complexity of his records. When he has become thoroughly immersed in this game, the collector will want to know what other growers have done with his group; he will buy as much as space and his purse permit, and then do his best to produce a few seedlings of his own.

*Lexington Leaflets*, a publication of the Lexington Botanic Garden, Lexington, Mass., and costing \$2 a year for 12 four-page leaflets, contains much valuable information about hardy plants, including herbs, rock plants, wild flowers, and border perennials. The director, Stephen F. Hamblin, answers all kinds of questions from subscribers so far as his time permits; and to students, garden club members, and anyone who will really use them, he will send whole sets of back numbers from 1931 for the cost of mailing. Otherwise, back numbers cost \$2 a set, and 20¢ per leaflet.

## STORAGE BATTERIES

An important part of CU's tests on automobile storage batteries is still under way: tests to determine the relative lives of the different batteries under operating conditions. But these require three months for completion. Meanwhile, we are presenting here, as an interim report, a list of the batteries which have been found best on the basis of tests completed so far on capacity (how much charge the battery will hold) and cold weather cranking ability. These should be of value to those who must buy a battery now, and cannot wait for the full report.

#### BATTERY INSULATION

Two different types of batteries are offered on the market: glass (double) insulated and wood (single) insulated. In general, the glass-insulated models sell at substantially higher prices than the wood insulated. Whether this price difference is justified on the basis of longer life expectancy we shall not be able to report until the life tests are completed; all that can be said in this regard now is that Federal Specifications do call for somewhat longer life in the double-insulated batteries.

Mail order and auto supply house brands of batteries are cheaper and appear to be at least as good as the advertised brands, on the basis of tests completed to date. In buying these or any other batteries, the consumer should demand a guarantee against defects and failure over a period of time.

All the batteries listed below were of the standard size (SAE No. 1H), which fits a majority of cars on the road today.

On the basis of the tests made so far, the following appeared to be the best batteries of each type. They are listed in estimated order of quality in each class, on the basis of tests to date.

CONTINUED NEXT PAGE



*A preliminary report, based on tests for capacity and cold weather cranking, for those who must buy an auto battery now and need the best available information.*

### Single (Wood) Insulated Batteries

**Kwik Start Type H1** (Montgomery Ward). \$6.20 less 75¢ trade-in allowance on old battery. Guaranteed for 18 months. Available at Montgomery Ward retail stores.

**Wizard De Luxe Type 15W** (Western Auto Supply Co., Kansas City). \$7.45 less \$1 trade-in allowance on old battery. Guaranteed for 18 months. Two samples with the same model number were tested, with widely different results. The battery referred to here as being good may be identified as follows: Labeled "3.5 mins. 300 amps O F" (rather than 3.4 mins); "Wizard" molded into the cell-filling caps; polarity ("POS" and "NEG") marked on top of the case (rather than on the lead terminal posts). Available on West Coast at Western Auto Stores.

**B. F. Goodrich Standard Type S-145** (B. F. Goodrich Co., Akron). \$10.95. Guaranteed for 15 months or 15,000 miles, whichever is less. Available nationally.

**Atlas Type A1** (Standard Oil Co. of N.J., NYC). \$9.45. Guaranteed for 21 months. Available nationally.

### Double (Glass) Insulated Batteries

**Atlas Type AG-1** (Standard Oil Co. of N.J., NYC). \$13.85. Guaranteed for 27 months. Available nationally.

**Wizard De Luxe Type 15G** (Western Auto Supply Co.). \$7.85 less \$1 trade-in allowance. Guaranteed for 24 months. Available on West Coast at Western Auto Stores.

**Winter King Type W-1** (Montgomery Ward). \$7.70 less 75¢ trade-in allowance on old battery. Guaranteed for 24 months. Available at Montgomery Ward retail stores.

**Allstate Cross Country Cat. No. — 28DM46F** (Sears, Roebuck). \$4.90 plus shipping charge, less 75¢ trade-in allowance on old battery. Guaranteed for 18 months. Available by mail order.

# RUGS

An expert's suggestions on how you can extend their useful life by judicious care and repair

by Helen Madeleine Klemm

A good rug can take a surprising amount of abuse, and most rugs get a great deal of it. But there comes a time when the accumulation of abuses manifest themselves in a serious flaw—a worn spot, a hole, a frayed edge. It is possible, of course, to postpone this evil moment through preventive measures, by proper care of the rug (to be discussed later). But if your rug is beyond the initial preventive stage there are still many things that you can do or have done to extend its useful life.

#### HOLES

A hole in your carpet demands prompt attention, not only for esthetic reasons, but for reasons of economy as well. In most cases, mending of a small hole can be done relatively easily and inexpensively. But if it is neglected, the hole often becomes larger, or becomes the beginning of a tear which may make repair prohibitively expensive.

If your rug is an old one—a "make-it-do" affair that you are planning to replace fairly soon—you may want to consider a makeshift job instead of a careful repair. The simplest trick is to turn the rug around, so that in its new position the hole is covered by a piece of furniture, or is banished to a dark or unseen corner of the room. Or, if that won't work and your rug is a plain one, perhaps the site of the hole can be covered with a colorful scatter rug. In the absence of these measures—if you're content to leave the hole, but want to prevent its growing larger or tearing—the easiest makeshift is a patch under the hole. Cut the patch from a tough, sturdy material, leaving a margin of about 1½ inches beyond the hole on all sides. Center the patch under the hole, and attach it from the reverse of the

rug, using a heavy thread and basing the stitches about ½ inch from the edge of the hole, all around. If you select the patching material so that it matches the adjacent rug area, the hole will be rendered less conspicuous.

These are all temporary measures. For a permanent and inconspicuous repair job, you'll need professional help. But before you call in the rug repair man, you should know what the possibilities are.

#### PATCHING THE HOLE

The technique for professional patching consists of squaring off the irregular edges of the hole, cutting out a new square of repair material to match, and then stitching the edges of the patch to the hole from the reverse side. The big problem is to match the fabric exactly, so that the "plastic surgery" is made invisible.

If yours is a single-color broadloom, the problem is generally relatively simple, particularly if you had the foresight, when you bought the rug, to buy a small, extra strip for just such emergencies. But even if you didn't, a good rug repair man should be able to supply a good match without too much difficulty. The price of such a patching job should be about \$5 to \$7 for a patch of about 2 x 2 inches.

With a patterned domestic rug, perfect (invisible) patching is difficult, if not impossible. Your best compromise, if the hole is small, is to ignore the pattern and have the patch supplied in the color most generally predominant in the area where the hole was made.

Hand-woven Oriental rugs present quite a different problem. If you have a valuable rug, scheduled to be passed down the next few generations, a really fine repair job on it



*To put on new binding, first sew it to the face of the rug, as shown. . . .*

*. . . then turn back the binding and attach it to the rug's reverse.*



will be well justified. This calls for reweaving. But, though the reweaving of a hole in an Oriental rug is a highly skilled job, often performed by artisans of the country where the rug was originally produced, there's no reason why the process should be veiled in Oriental mystery, with correspondingly exorbitant charges.

#### **REWEAVING ORIENTAL RUGS**

In reweaving a rug, the frayed or burned edges are first trimmed off without enlarging the hole more than necessary. Then the warp and the weft (which form the canvas-like base of the rug) are restored by carefully connecting the interrupted threads from the reverse. And finally, woolen knots are tied into the base weave, following the colors and patterns of the original design. When the new tufts are sheared off it should be quite impossible to find the place where the reweaving has taken place, from examination of the rug's surface.

The cost of reweaving is high, but there is no reason why it should be immoderately so. A favorite trick of rug reweavers in boosting prices is to claim that they will have to dye the mending wool in order to match your rug exactly. Actually, any good repair man will have in stock—or he can get—wool of any needed shade. If he insists that he can't, better try another rug mender.

Reweaving is not, however, the

only way to mend a hole in an Oriental rug. Patching, similar to that done on broadlooms or other domestics, may fill your needs—though this will lower the resale value of your Oriental. Rugmen who are accustomed to work with Oriental rugs generally keep a stock of old rugs to be used for just such a purpose. In fact, there are unscrupulous repairmen who do nothing more than insert a patch from such an old rug, when their orders—and their prices—call for reweaving. Skillfully done, a patch on an Oriental can be quite inconspicuous, though it can always be seen on close examination.

If you ask for a reweaving job, you would do well to mark the site of the hole before the rug is taken away, and then to examine it carefully, to see that it has actually been rewoven rather than patched. Be sure that you are not paying the price for reweaving when you order a patch job. The simplest way to assure a fair estimate is to ask first the price of reweaving, and only after you have been told that, the price of patching. Patching should cost 50% to 60% less than reweaving.

#### **EDGES**

Frayed or worn edges rank next to holes among rug diseases. They, too, need prompt attention, for unless the damage is checked quickly, it tends to spread and get out of hand.

On broadlooms, one of the bound ends is generally the first to go. If you notice the difficulty early enough you can usually remedy it by simply turning the rug around, so that the worn edge is transposed to a part of the room which has lighter traffic. But if fraying has already started, you would do best to replace the worn binding.

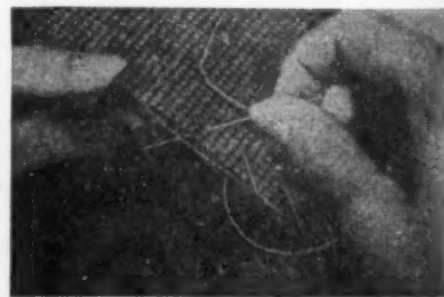
If you call in a professional to do the job, be prepared to be firm. In all probability, the binding will need replacement only on one edge, but very likely, the repair man will insist that it ought to be done all around. His excuse may be that a matching shade is not available, and so both ends will have to be renewed to have a harmonious job. This excuse—though it may have applied during the war years—is no longer valid. Most department and upholstery stores have an abundant selection of rug binding tapes.

#### **THE BINDING JOB**

If you are reasonably skillful and willing to undertake a hard job, you can do the rebinding yourself. If the old binding is still firmly attached, and not beginning to pull away from the rug body, it's perfectly safe to put a new binding over the old, without first ripping it off. Use a heavy steel needle and a double thickness of linen or carpet thread.

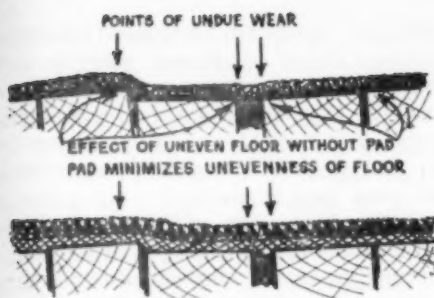
Putting on a new binding when the old one has first to be taken off is much more difficult, and doing it at home is not generally recommended. Nor are most amateurs able to do satisfactorily the cutting and rebinding involved when large sections of the old binding have been pulled away from the carpet, though small detached sections may be sewn back with a heavy thread, using a simple overcast stitch, as an emergency measure.

Wear at the selvage edge of the



*A fraying edge is best retrieved by overcasting, with the stitches far enough apart to prevent ruffling at the rug's edge.*





A PAD UNDER THE RUG prolongs its life by minimizing the unevenness of the floor boards. Uneven flooring results in excessive rug wear.

rug offers a different problem. The wear occurs over a period of time, and is generally not noticed until the edge has worn through. This is the time to act; a little more wear, and raveling will begin. And when that happens, the damage may be irreparable; or if it can be repaired, as it can on Orientals, this will be difficult and costly.

Repairing of worn edges is not difficult, if it is done in time. All you need is some matching tapestry wool, a heavy steel needle, and some time and patience. Using a double or triple thread, sew with an overcasting stitch along the entire worn edge. Leave a little space between stitches, rather than crowding them one on top of the other, for overcrowding of the stitches may result in a ruffled rug edge. Be careful to make all stitches the same depth from the edge if you want a professional-looking job.

If the damage has gone too far for overcasting, you have two alternatives: to have a professional re-weaving job done, or to have the edge cut off, and the rug bound all around. The former is very expensive, and you will want to consider it only for a valuable rug. Binding is much less costly, and it may be quite satisfactory, provided the cutting off of the edge does not spoil the design of the rug.

#### THIN SPOTS

Wear on carpets is always uneven, and, especially if you haven't taken the precaution of turning them around occasionally, sooner or later they will develop some thin spots, where the tufting has worn down. If turning the rug will no longer do the trick, some repair work may be

needed. On a large, plain rug, it may be worth while to have the offending area cut out, and a matching patch put in its place. This is often not practical for a rug in the home, for adjacent areas are also generally somewhat worn, and the new material of the patch is likely to be at least as conspicuous as the worn spot.

On Orientals, thin spots can be repaired, provided the warp and weft of the underlying material have not been damaged. The process involves removal of the worn-out tufts, and re-knotting with new wool—actually, replacing the nap in the worn area. Such a job is more or less expensive, depending on the size of the spot.

Worn areas on most patterned domestic carpets cannot be repaired. The only thing possible in the way of salvage is to cut the carpet into smaller scatter-rugs or hall runners, discarding the worn portions.

#### CURLED CORNERS

Corners which tend to curl up are one of the more annoying of minor rug ailments. Not only are they dangerous to life and limb, but they are bad for the carpet, in that they tend to cause cracking of the material.

You can make them stay flat with the use of some small cardboard or linoleum squares, three to four inches on each edge. Divide the squares diagonally, and then sew a triangle under each curled corner, using a heavy double thread and a strong needle. Attach the triangle about  $\frac{1}{8}$  inch in from the edges of the rug, so that it does not show.

#### PILE BENDING OR CRUSHING

As you move furniture from one part of the room to another, or as you turn your rug around, you may find that some parts of the pile, which were under heavy furniture pieces, have become flattened out. To restore them to normal level, place a wet cloth over the flattened place, and hold a hot iron about  $\frac{1}{4}$  inch above the cloth until the steam stops rising. Then let the pile dry slightly, and brush the nap back to normal.

#### CARE

It has been estimated that 30% to 40% of rug damage results from careless use. Regardless of the figure, there is no question but that the useful life of the rug could be ex-

tended greatly if a few simple rules were observed. Here are some suggestions:

**TURN THE RUG.** Don't keep the rug in the same position, so that the same sections are always exposed to the heaviest traffic.

**USE CASTER CUPS** under the legs of heavy furniture. Sharp legs bearing heavy weights may permanently damage the foundation fabric of your rug, or mash the pile beyond repair.

**DON'T USE YOUR HEEL** to straighten a rug that's out of line. Gentle patting with the hands is not much more trouble, and is much easier on the carpet.

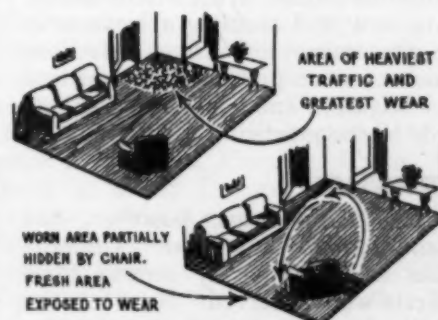
**USE A RUG PAD.** This cushions the strains of walking, and adds to the softness as well as to the durability of your rugs.

**DON'T DRAG FURNITURE.** Pick up chairs, bridge tables and other furniture when you want to move them.

**DON'T TILT CHAIRS.** The tremendous pressure combined with the sharp edges of tilted chair legs can easily dig holes in your rugs.

**KEEP THEM CLEAN,** but don't be fanatical about it. A daily once-over with a carpet sweeper, plus weekly vacuum cleaning is regarded as the best plan. Vigorous sweeping with a broom is not a satisfactory method of cleaning.

**DON'T BEAT OR SHAKE** the rug. This breaks the foundation yarn and loosens the pile.



**TURN THE RUG AROUND, now and then,** if you want to get the most out of it. This simple procedure helps distribute the wear, and avoids excessive wear at the spot where traffic is heaviest.

# HEALTH AND MEDICINE

HAROLD AARON, M. D., SPECIAL MEDICAL ADVISER

MEDICAL CONSULTANTS: Dr. Anton J. Carlson—Chairman, Dep't of Physiology, University of Chicago; Past President, American Physiological Society; Dr. Theodor Rosebury—Associate Professor of Bacteriology, College of Physicians & Surgeons, and School of Dental and Oral Surgery, Columbia University; Dr. Marlon B. Sulzberger—Ass't Professor of Clinical Dermatology and Syphilology, New York Post-Graduate Medical School, Columbia University; Editor, Journal of Investigative Dermatology.

CU's Medical Consultants give technical advice on matters of medicine which lie within their fields. CU is responsible for all opinions concerning social, economic and public health questions.

## Chemotherapy

*The first of two articles by CU's Medical Adviser, discussing penicillin and sulfa drugs—their uses and hazards.*

Chemotherapy—the treatment of infectious diseases with specific drugs or chemicals—was born about 40 years ago when Ehrlich discovered the famous magic bullet against syphilis—"606" or Arsphenamine. Spurred on by Ehrlich's conviction that the body could be freed of an infectious organism by a single dose of the right drug, thousands of investigators have since sought for the magic bullet against the infectious and parasitic diseases afflicting man.

After 30 years of indifferent success, chemotherapy took an enormous leap forward with the discovery of the sulfa drugs. Sulfathiazole, sulfaguanidine, sulfasuxidine, sulfadiazine—one after another, new and better types of sulfa drugs were developed from the mother drug, sulfanilamide. And new and startling achievements in the control of serious infectious diseases were proclaimed by medical investigators and applied at the bedside by the practicing doctor.

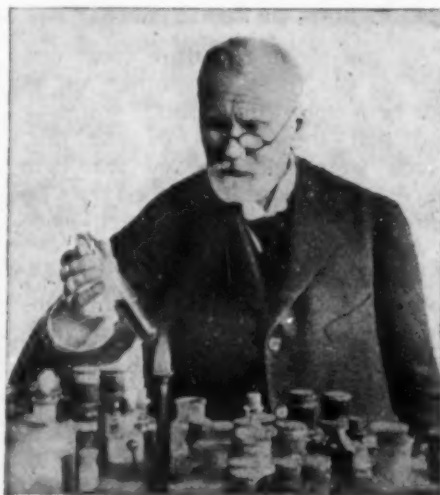
### NO PANACEA

The sulfa drugs, however, had some serious drawbacks. Undesirable and occasionally serious toxic effects were observed. Nor were the sulfa drugs universally applicable; some infections weren't touched by them.

The problem of finding a drug that would cure a greater range of infectious disorders without fear of harm to the patient seemed to be on its way to solution with the discovery of "antibiotic" substances. This was

the third—and so far, perhaps the most important—advance in the field of chemotherapy. The achievements of the most important of these "antibiotics"—penicillin—have made poets of prosaic medical men and scientists.

Unfortunately, however, even to the good things in medicine there seem to gather the barnacles of commercialization and waste. After the sulfa drugs were discovered, a variety of sulfa preparations were thrown on the open market, without adequate scientific rationale. Sulfa nose drops, sulfa chewing gum, sulfa lozenges, sulfa Band-Aids, sulfa ointments and many others were offered to the credulous public. Some of the results of this wholesale exploitation



PAUL EHRLICH, discoverer of Arsphenamine, the "magic bullet" against syphilis, and father of chemotherapy.

have—as will be discussed—been nothing short of tragic. In fact, many State and city regulatory bodies have now taken steps to prevent indiscriminate sale of sulfa drugs. So far, penicillin has not met with the same fate as sulfa.

Sulfa drugs are still among the most valuable weapons against an important group of diseases including pneumonia, meningococcus meningitis, streptococcus infections and gonorrhea. They are of no value, however, in the treatment of virus infections such as the common cold, influenza, grippe, poliomyelitis and encephalitis. Nor are they of value in certain other diseases, including typhoid fever, tuberculosis, rheumatic fever, rheumatoid arthritis, degenerative arthritis, ulcerative colitis or cancer.

Abuse of sulfa drugs has occurred particularly in the treatment of common respiratory diseases. The common cold or grippe is not cured or relieved by sulfa drugs either when they are taken internally or when used as sprays, gargles, nosedrops or nasal jellies. Sulfa nose drops deserve particular mention, because they have been extolled by the drug houses, and are even prescribed by many doctors. Yet there is no sound evidence that they relieve a cold, shorten its duration, or prevent complications. In fact, a good case can be made out for condemning the use of sulfa drops in colds solely on the ground that they—like other nose drops—tend to spread infection to the sinuses and ears.

### SULFA-RESISTANCE

But there are even stronger reasons for avoiding the use of sulfa drugs, in whatever form, in the treatment of common colds and infections of the respiratory tract. These reasons were recently stated by the Committee on Public Health Relations of the New York Academy of Medicine:

"After looking into the matter carefully this sub-committee has come to the conclusion that clinical experience bears out the fact that a small percentage of people become sensitized to the sulfonamide ["sulfa"] drugs, that a severe systemic [constitutional] reaction may be produced in these persons when the drugs are administered a second time and that a minute amount of the sulfonamide drugs applied to the unbroken skin or to the mucous membranes can and does sensitize an



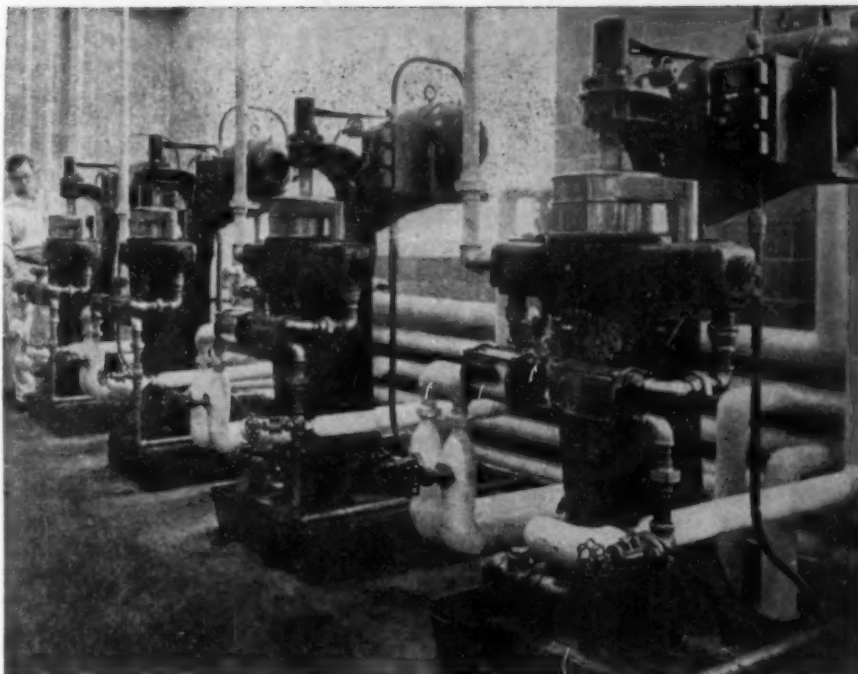
individual even more quickly and with greater certainty than when drugs are administered by mouth. . . . Such sensitization is often dangerous and prevents the use of the sulfonamide drugs in treatment of conditions in which they are particularly indicated."

Sensitization is particularly apt to occur with the use of sulfa ointments. The use of an ointment in conjunction with sulfa drugs taken internally is particularly fraught with danger. Severe local and generalized skin eruptions have occurred, and such patients may never again be able to use sulfa drugs if they acquire such infections as meningitis, pneumonia or gonorrhea. Furthermore, according to the sub-committee's report, "the wide use of the sulfonamide drugs in ineffective concentrations may result in an increase in organisms resistant to the sulfonamides."

#### ABUSE OF SULFA

Although sulfa drugs are effective against streptococcal infections, medical authorities deplore their use in the treatment of mild sore throats even though throat infection is usually due to streptococci. According to these authorities, the risks involved in a mild attack of sore throat or tonsillitis in an otherwise normal person are not great enough to justify the use of a drug that can induce sensitization or provoke the development of drug-resistant bacteria, so that the drug becomes impotent to cure a subsequent, really serious infection. Of course, where the sore throat is attended by the danger of complications, such as middle-ear infection, there is no question about the wisdom of using the sulfa drugs. Actually, it comes down to whether the infection under treatment is sufficiently serious to risk jeopardizing subsequent use of sulfa drugs.

The problem of "drug-fastness"—the resistance that bacteria can acquire to sulfa drugs and even to penicillin—has become a crucial problem in chemotherapy and in public health. Recently it has been noted that some infections tend to respond less and less satisfactorily to treatment with the sulfa drugs. In gonorrhea, especially, considerable difficulty is now encountered in curing the infection with sulfa. For example, Doctors Carpenter et al, in a report in the *American Journal of Public Health*, showed that while



—Photo Acme

MASS PRODUCTION is now being applied to the making of penicillin. Here is a view of the high-speed centrifuges which separate the precious substance.

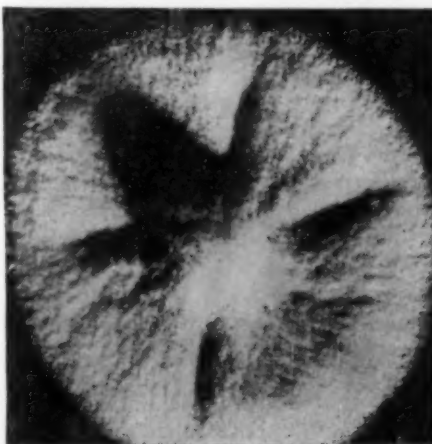
only 15% of gonococcus cultures studied by them in the early part of 1942 failed to respond to sulfonamides, by July of 1943, those which did not respond had increased to 59%. In other words, with the passing years, gonococci—and other bacteria as well—appear to be acquiring more and more resistance to the sulfa drugs.

This is a very serious public health problem, for it means that sulfa-resistant strains of bacteria are developing, so that eventually many infections and contagious diseases now curable by them may no longer re-

spond to the action of the sulfa drugs. Self-medication with sulfa bought over the counter, improper use of the drugs by the practitioner for infections in which the drugs are of little value, the use of the drugs as prophylactics against respiratory disorders, and inadequate doses in the treatment of serious infections—these are important factors in the growing incidence of sulfa-resistant organisms.

While these disturbing facts about sulfa drugs were being gathered, intense investigation of "antibiotics" for the treatment of infectious diseases was going on. "Antibiotics" are agents that exert an unfavorable effect on the life process of bacterial or microbial cells. The phenomenon of "antibiosis" was brought into medical care by the studies of Dr. Dubos and his collaborators of the Rockefeller Institute; Doctors Fleming, Chain, Florey et al of Oxford; and Dr. Waksman and his group at Rutgers. They found that certain bacteria and fungi inhabiting the soil are capable of producing a soluble "enzyme" that can destroy or inhibit the growth of disease-producing organisms. Penicillin, streptomycin, tyrothricin and streptothricin are the most important of the new antibiotics.

Their function, and a comparison of their uses and action with those of the sulfa drugs, will be discussed in a forthcoming issue of the *Reports*.



—Photo Acme

ENLARGED VIEW of the mold "*Penicillium notatum*," from which penicillin is derived.

# YOUR CHILD

## *A psychiatrist's advice to parents on the subject of raising children and coping with their problems.*

by Dr. Joseph Lander

A great many people who are able to discuss surgery or astronomy or bee-raising with relative objectivity, show a strange reaction when the conversation veers to psychiatry. Too often feelings and emotions appear which promptly alter the quality of the discussion, and result in the generation of more heat than light. Few people would hesitate to consult an ophthalmologist or a dermatologist if they thought it necessary, but even today there are many who would rather die than be found in a psychiatrist's office.

### **HANDICAP OF PEDIGREE**

Unfortunately, the aura of mysticism and worse has some foundation in the historical background of this science. The psychiatrist of today is the direct descendant of a long line of witch doctors, philosophers, priests—in fact, until quite recently, of almost everything except scientists. Psychiatry can point with much greater pride to the length of its pedigree than to the objectivity and scientific soundness of its exponents prior to the past generation or two, and the psychiatry of today has yet to overcome the handicaps of its mongrel background.

Some of society's resistance to psychiatry comes from other sources. One is the unwillingness to believe that man is actually not master of his soul, that he is driven by forces which he is not merely unable to control, but worse: forces of whose very existence he has hitherto been unaware. This comes as a crushing blow to those who believe themselves to be rational and logical creatures.

In addition, psychiatry has demonstrated that a not inconsiderable proportion of those who have fallen by the wayside emotionally would have survived fairly adequately if society were differently constructed: if the

competitive struggles were less violent, if anti-social forces within the community were better regulated, if the pressures of society were less intense. This unwelcome revelation, even if only half perceived, arouses severe hostility.

In spite of these several problems, modern psychology and psychiatry are receiving progressively more recognition as sources of badly needed help for mankind. Today we have good reason to hope and to believe that the social sciences may prove as much a boon to mankind as the physical sciences have been in the past few decades.

### **PREVENTION VS. CURE**

As with other branches of medicine, more can be accomplished in psychiatry by prevention than by treatment. This is not to say that treatment is ineffective. But just as medicine could not cope adequately with typhoid fever or diphtheria or smallpox by treatment of the individual case, and solved these problems only when preventive measures were instituted, so also we cannot hope to deal adequately with the enormously wide-spread emotional problems of today by treating only the sufferers from such disabilities. Even if there were a hundred times the number of adequately trained psychiatrists we actually have in this country, only a minority of those in need of help could avail themselves of this psychiatric service. Meanwhile, new problems would continue to be ground out of the community at a rate far greater than the treatment facilities could handle them.

For this reason, the emphasis in this series of articles will be largely on children. By preventing the appearance of emotional difficulties in them, we can hope to build an emotionally healthier society.

In most States in this country one cannot drive an auto without first acquiring some skill, some understanding, some knowledge of the rules; and then undergoing an examination in which this knowledge and skill are demonstrated to the satisfaction of the proper authorities. That is as it should be, for the good of the driver himself and for the protection of the others who might be affected by his driving.

The rearing of children is a job infinitely more complicated, infinitely more important, and requiring much more judgment and skill than the driving of an auto. Yet society works on the assumption that anyone physically capable of becoming a mother or a father thereby has the necessary wisdom, the emotional maturity and the judgment to raise the child well.

### **THE PROBLEM OF ADJUSTMENT**

The customary retaliation is that for many thousands of years children have been raised without the help of psychiatrists or psychologists. And, although some people did develop problems, the vast majority managed to grow up, make a living, get married, join a lodge, and otherwise survive their childhood thumbsucking or bed-wetting or shyness or destructiveness.

In reply I would ask that each reader ask himself how many people he knows who are really happy much of the time? How many people function at anything like their potential capacity? How many are even moderately free of worries and troubles which arise from difficulties within themselves, as distinguished from problems immediately due to the world about them? The better one comes to know people, the more one realizes how many of them are like six-cylinder engines with three or four cylinders out of commission.

In the motion picture, "Over 21," the statement was made that the world is like an apple pie in some respects: what comes out of it, what the finished product is like, depends on the ingredients which go into it and the care with which these ingredients are prepared. The same might be said about the rearing of children: how they will turn out, how well adjusted they will be, how much fun they will get from life, how much pleasure they will give their parents and others, and how they will develop their individual potentialities, will depend on what ingredients go into their upbringing.



"Difficult" children are seldom born difficult. New-born children have their individual mental and physical differences and different hereditaries, but the problems which trouble most parents are the result of faulty early environment in the vast majority of cases, rather than the result of inborn faults or defects. Bed-wetting, timidity, finicky eating, overactiveness and over-destructiveness—these and many other childhood problems are practically always related to the environment; only occasionally are they due to physical defects, glandular troubles, etc. The presence or absence of such symptoms, such behavior difficulties, is as a rule a reflection of the child's emotional health.

### EMOTIONAL HEALTH

What are the prerequisites for emotional health in children? One is that the parents must get along pretty well with one another. Tension and problems inevitably arise between two people living together, but if there is *chronic* bickering or irritation, no matter how hard the parents may try to conceal it, the child will certainly be sensitive to it and react to it with difficulties and anxieties of his own.

Another prerequisite for emotional health in children is the knowledge of being deeply wanted by the parents. A child who, rightly or wrongly, believes himself to be unloved, or not loved enough, cannot avoid developing serious anxiety.

Another essential factor for emotional health is economic security in the household. A parent who is tense and worried about the rent or the coal bill, a chronically unemployed father, a mother harassed by vain efforts to make ends meet—such parents, themselves insecure, cannot give their children the sense of security which is indispensable to good emotional adjustment.

All these factors—reasonably well-mated parents, who really love their child, in an environment of economic security—are the prerequisites for the best emotional climate. They are as necessary in the development of the personality as milk and vitamins are in developing proper bone structure. It is true that many children do grow up without enough milk and proper vitamins, but we know that such children are more likely to develop complications when something goes wrong than are those who were

correctly fed. The same reasoning applies to the personality structure.

There is yet another important factor: a respect on the part of the parent for the child's individuality—a willingness to let the child do things his way, allowing him to learn the things to which his natural curiosity brings him, and not just the things which mother knows it is important for him to learn. Many parents, without being aware of it, go too far in imposing their own standards and their own ideals on the child. Does this mean that children should be given a free rein and allowed to do as they wish? Far from it: life in a community would be utterly impossible without the exercise of a great deal of self-discipline and a great deal of self-restraint by the members of the community.

The term "emotional security," better than any other, describes the emotional needs of children. If a child develops emotional insecurity, because of a serious lack in the factors mentioned above, then symptoms will appear. Whenever a child sucks his thumb beyond a certain age or wets the bed longer than is customary among most of the children in his group and environment, or is timid to the extent of interfering seriously with group participation, or is unhealthily active or destructive, then we may be reasonably certain that somewhere along the line that child's instinctive emotional needs are not being satisfied. Such symptoms are actually danger signals, telling us there is something wrong. They are like the pain of a broken bone, calling attention to the fact that damage has occurred, and that something must be done about it.

This leads to a most important

fact: that the *symptom* is not the real basis for concern; it is the *cause* of the symptom which is the important thing, and it is the *cause* which must be uncovered and treated.

A headache can come from many different causes. It may be due to worry, fatigue, or even serious physical disease of the brain or other organs of the body. Naturally, the correct treatment will depend on the cause. One does not treat the headache due to fatigue in the same fashion as the headache due to lead-poisoning or syphilis.

### BASES FOR UNREST

The same holds true in such situations as, let us say, faulty eating habits. Is the child finicky because he knows that this disturbs his mother and he is angry at her for giving more attention to baby brother? In this way he has his revenge. Or, without a revenge motive, he may be doing the same thing because he will get more attention. Or he may be finicky because he wants to "stall" in order to stay awake later and avoid going to bed. Or he may be a poor eater because he is too keyed-up, too tense because of inadequate rest or the wrong type of play activity. We need to find out what the sign-language of the symptom is really saying in disguised fashion, then tackle the cause. The same process applies to the other problems which upset the smooth course of childhood development.

One must, by the very nature of the situation, be vague and general in giving advice. In subsequent articles we shall discuss in greater detail some of the specific problems to which reference has been made in this introduction. In general, the universal principle applies regarding the need of all children for obvious evidences of love and affection; their need for a stable and secure environment reasonably free of conflict and tension. One must also emphasize that the child does not grow, nor does the family exist, in a vacuum: a world of unemployment, a world facing the threat of another war, a world of intolerance and prejudice, of bigotry and injustice will affect the child's character and emotional life as surely as typhoid germs in his drinking water will affect his physical health. Whatever is done to make our society more truly democratic, and provide more widespread security for parents, will contribute to the emotional health of children.

### About the Author . . .

Dr. Joseph Lander, the author of this series, is a graduate of the Yale Medical School, and has been engaged in neuropsychiatric work for the past fifteen years. He is the author of numerous medical articles on neurological and psychiatric subjects. During the past three years, Dr. Lander was a Major in the Army, in charge of neuropsychiatry at a large Air Force hospital.

# The RH factor

*A discussion of the recently-discovered blood ingredient which has been the cause of much infant mortality, with suggestions on how simple blood tests may avert grief.*

The everyday use of blood in the treatment of shock, severe infections and other disorders has made people familiar with the fact that the blood of all individuals can be grouped in four main types or groups: O, A, B and AB, according to the kind of "agglutinin" present in the red blood cells. After these group characteristics were established it became evident that if blood was transfused from a donor belonging to the same type as the patient, transfusion reactions largely disappeared. Transfusion thus became a safe and valuable measure in medicine.

## WHAT IS RH?

The RH factor is still another "agglutinin" recently added to the family of blood groups. It was first discovered in 1940 by Doctors Karl Landsteiner and Alexander Wiener. They injected into rabbits the red blood cells of the rhesus monkey and found that the cells stimulated the development of antibodies in the serum of the rabbits. When this serum was then mixed in a test tube with the red blood cells of human beings, agglutination (clumping) of the red human blood cells occurred in about 85% of the cases. The agglutinin present in human red blood cells was named the "RH factor" because it had been found first in the red blood cells of the rhesus monkey, RH being the first two letters of the word rhesus.

The 85% or so of the human population who have the RH factor in their red blood cells are called "RH+" (positive) persons. The 15% or so in whom it is absent are called "RH—" (negative) persons. This discovery helped explain most of the reactions occurring after transfusion, which could not be un-

derstood on the basis of the original classifications of blood groups as O, A, B and AB. Work by other investigators showed that the RH factor was also responsible for certain complications occurring in pregnancy and for the development of a serious disease of the new-born child—"erythroblastosis fetalis."

It is now established that RH+ cells, given in the form of a transfusion to an RH— patient, can stimulate the development of "anti-RH agglutinins" in the patient. If then a second transfusion of RH+ blood is subsequently given to the RH— patient, a so-called "hemolytic reaction" occurs. The reaction varies in severity from a mild chill and fever to a severe disturbance in kidney and liver function, and even to death. Such a hemolytic reaction never occurs at the time of the first transfusion unless the patient is pregnant and carries a fetus which also has RH+ blood. In this case the fetus, through its free communication with the blood channels of the mother, causes the development of agglutinins in the mother. If the mother receives a first transfusion of RH+ blood, she may have a severe transfusion reaction.

## BLOOD TYPING

It has become an essential part of blood transfusion technique, therefore, to type all patients not only into groups O, A, B and AB, but also with respect to the RH factor. If a person is RH— and needs a transfusion, only blood from an RH— donor should be used. This is particularly necessary when many transfusions are to be given. Only under conditions of the most extreme emergency, when every second counts and no time can be lost in typing the blood,

is untyped blood used. In fact, the larger hospitals are making a practice of having RH— blood available in their blood banks so that transfusions can be given with it when there is not sufficient time to carry out a complete grouping, typing and cross-matching.

Transfusions into a pregnant woman are dangerous even the first time if the woman has a history of having had a still-birth or a previous delivery of an infant with jaundice, anemia or erythroblastosis fetalis. In such cases it is found that the husband and the child are RH+ and the mother is RH—. An RH— woman may have one or more transfusions of RH+ blood before or during pregnancy and yet suffer no reactions, but if the fetus she is carrying has acquired the RH+ factor from the father, then it may be born afflicted with erythroblastosis fetalis or delivered as a still-birth.

## OTHER COMPLICATIONS

Still-births and erythroblastosis can occur even without transfusions into the mother. In such cases the first pregnancy was always normal. The first child has RH+ blood acquired from the father. As explained above, while the child was still in the uterus, it caused the development of anti-RH agglutinins in the mother. During subsequent pregnancies, the effect of the presence of these agglutinins becomes evident and increases in intensity. If the mother has accumulated a sufficient amount of the agglutinins, they will pass back into the fetal circulation and affect the fetus. The effect on the child may be mild and consist of mild jaundice or anemia which disappears spontaneously, or the effect may be severe, and the child be born with severe jaundice and anemia—that is, erythroblastosis fetalis.

Statistically it has been shown that only one in about 15 marriages between an RH— woman and an RH+ man will lead to erythroblastosis in the offspring, and usually this does not occur until the second or later pregnancy. Another source of comfort to RH— mothers is that about 50% of men who are RH+ can father RH— children as well as RH+ children, and since two or more pregnancies are necessary to produce infants suffering from erythroblastosis, the disease remains a fairly rare complication of RH differences between mates. As one doc-



tor has well said, "It may even be suggested that other incompatibilities between man and wife are more hazardous to married life than differences in the RH factor."

The practical point to be made with respect to pregnancy is that after the first pregnancy, every mother should be tested for anti-RH agglutinins during subsequent pregnancies. If an infant with erythroblastosis has already been born, the parents should consult a blood specialist to determine the likelihood of future complications in pregnancy or

the possibility of the mother being delivered of an infant afflicted by erythroblastosis.

Since transfusion reactions can be avoided by proper typing, many doctors and public health officials are urging that soon after birth, every child should be typed with respect to the RH factor. It is also advised that couples about to marry should have an RH typing at the same time that a Wasserman test is performed. Consumers should discuss with local health authorities the possibility of providing such a service.

amounts of phenolphthalein-containing laxatives.

Furthermore, the laws of nature, with respect to bowel movements or any other physiological activity, act in diverse ways in different individuals. For some children and adults it is normal to have one bowel movement daily; for others once every two or three days is perfectly normal; and for still others two movements a day may be normal. Furthermore, changes in the pattern of bowel action may occur in every person, depending on changes in diet, working habits, toilet routine and mental state. Such changes in bowel rhythm need excite no anxiety, either in mother or in child. After a day or so the normal rhythm for the individual will usually assert itself without the use of any laxatives or cathartics.

Unfortunately, however, too many mothers get the bulk of their education about human physiology from patent-medicine manufacturers who have long and effectively exploited human ills in expensive ads in our "best" magazines.

#### "NICE AND GENTLE"

If *Life* and other leading magazines would be "nice and gentle" with their readers, they would stop accepting ads for potentially harmful drug products that are deceptively advertised. Or are we too naive about the functions of our most respectable journals?

## Ex - Lax

### *The story of an advertising campaign gone wrong*

"What's the best way to teach a child obedience?" asks a half-page ad in a recent issue of *Life* magazine. The eye of the reader, roving over three illustrations of mother and child in psychological combat and reconciliation, finds this puzzling problem settled with one bold word. It's *Ex-Lax*. For "*Ex-Lax*" the ad reassures us, "is the Happy Medium" for making a child obedient to mother and to the demands of nature.

"Some laxatives are *too strong*. . . . Some laxatives are *too mild*," says the same *Ex-Lax* ad. Not so with *Ex-Lax*. It troubles the advertisers not at all that such a conclusion is illogical and unfounded.

#### WHAT IS TOO STRONG?

It is elementary pharmacology to know that *any* laxative is *too strong* if the dose is too large and that *any* laxative is *too mild* if the dose is too small. Furthermore, persons differ in their response to the same laxative. One tablet of *Ex-Lax* may be too strong for one child and too weak for another.

The active drug in *Ex-Lax* is phenolphthalein. The action of the drug in *effective* doses is distinctly *not* "nice and gentle," as the ad claims. A laxative drug acting on the colon *must* irritate it to be effective. An effective laxative, therefore, is neither nice nor gentle to the intestines. Phenolphthalein in particular is

notorious for its capacity to cause skin eruptions, blisters in the mouth and other mild or serious toxic reactions in sensitive persons. The fact that *Ex-Lax* is sold in the form of tasty chocolate tablets adds to its hazard, for it tempts parents to believe that the drug is innocent, and it tempts children to try the whole box instead of a single tablet. In fact, several deaths have occurred as a result of the ingestion of excessive

## NEWS AND INFORMATION

### Compulsory Health Insurance

An answer to the objection that passage of the Wagner-Murray-Dingell Bill would interfere with "personal freedom"

The article by Dr. Ernst Boas in the January issue of *Consumer Reports* has evoked a number of comments from opponents of Federal Compulsory Health Insurance. Of five letters received denouncing the bill, four were from physicians. The criticisms display the familiar pattern characteristic of the arguments raised by the American Medical Association and the National Physicians Committee.

Some of the criticisms of the Wagner-Murray-Dingell Bill represent lack of knowledge of the real contents of the Bill. Others indicate a deep prejudice against any change.

A stock argument is that any benefits that Federal Health Insurance would provide would be obtained at the cost of the personal freedom of both the beneficiaries and the doctors. This is an argument raised whenever progressive social or health legislation has been proposed. Compulsory public school education, public water works and sanitation measures, and workmen's compensation legislation were all condemned and bitterly fought with the argument that they were infringements on private property and personal freedom. The fight against the employment of children under ten in the cotton factories of England in the last century was vigorously opposed by the manufacturers and industrialists on the basis that such government action constituted interference with "freedom of contract" between the factory owner and the child worker. The English Factory Act of 1844 was the first to attack the problem of industrial accidents and to establish a legal basis for their prevention. These provisions, however, stirred up opposition on the part of the employers. The Manchester cotton manufacturers went so far as to form a "Factory Law Amendment Association," to oppose factory inspection requirements. Charles Dickens referred to this Association as the "Association

for the Mangling of Operatives."

In the United States, the Federal Social Security Act has been in operation since 1935. Has this Act compromised the personal freedom of its beneficiaries? Quite the contrary is true. Working people, through compulsory contributions from their incomes, have been enabled by the Act to purchase at least a minimum of economic security, which they didn't have before. And no real freedom is possible without such security. Why not extend this freedom so that people can be free of the oppressive costs of medical care?

Persons with convictions about religious healing, Christian Science, etc., would not have to accept treatment by medical practitioners under Compulsory Health Insurance. Those who want to pay for private medical care would not be forced to accept the services offered by the Federal plan, just as those who wish to, and can afford to, may send their children to religious or private schools instead of participating in the free public school system under our compulsory education laws.

The medical insurance provisions of the Wagner-Murray-Dingell Bill provide that people should make small, periodic contributions by payroll deductions for the purchase of health security. It is hard to believe that such contributions would lower the "morale" or "spirit of freedom" of people, while their acceptance of medical care on an "elastic fee-for-service" basis or on a charity basis buoys up their morale and strengthens their spirit of freedom.

It is hard to believe, that is, unless you can also believe that compulsory education, unemployment insurance, old-age pensions, workmen's compensation and a host of other government functions which contribute to true civilization are morale-destroying and in conflict with the concept of "personal freedom."

#### YOU AND INFLATION

(Continued from editorial page)

that they write letters and get others to write letters. Write letters to the President, who needs to be overwhelmed with evidence that the people want his own anti-inflation program to be translated from words to action, and that they are backing Mr. Bowles and not Mr. Snyder. Write letters to your Congressman, who needs to be snowed under with statements that unless he supports an anti-inflationary program he won't be re-elected. Write letters to your Senators, whether they're up for re-election this year or not. Write letters to the members and the chairmen of Congressional Committees handling price control and related legislation. They, too, must be made to know where consumers stand. And finally, write letters to Mr. Bowles and Mr. Porter. No matter how firm their pro-consumer convictions, they will be less able to resist pressures for price increases from industry and from industry supporters in the government, if they, too, are not overwhelmed with evidence that consumers won't stand for more inflation.

Is that too many letters for one individual consumer to write? Then at the very least, write *one* letter to your Congressman. What should he be urged to do? The President himself provided the answer to that in his recent message to Congress, when he proposed these measures:

"(1) Extend the stabilization statutes without amendments and . . . do so with all possible speed so that there may be no question in anyone's mind concerning the determination of the Congress to see the fight against inflation through to the finish; (2) extend the subsidy program for another full year; (3) enact promptly the Patman Bill to establish price controls over housing . . .; (4) extend promptly the Second War Powers Act, so that the emergency powers we found necessary during the war may continue to be exercised wherever necessary to deal with the economic aftermath of war."

Are you opposed to having your rent raised by 25% to 100% before the end of 1946? Are you against an increase of 40% or 50% in the overall cost of living this year? Are you unwilling to see the country go through the agony of a larger-scale 1929-style smash-up?

Then the least you can do is to write that letter to Congress.



# Nominations to CU Board

Five members will be elected to the CU Board of Directors next June, when the terms of five present members expire. In accordance with CU's by-laws, nominations will be made by both the present Board of Directors and by individual members. The five directors whose terms expire are: Eleanor C. Anderson, Leland Gordon, Paul Kern, Edward Reich, Madeline Ross.

## Here Are the Rules as Provided by CU's By-Laws:

- Any member of CU may make a nomination. Each nomination must include the full name and address of the nominee plus, preferably, any relevant facts as to the nominee's scientific, professional, consumer, co-operative, labor and other connections, and the type of work he is engaged in.

- No one having a financial interest in the production or distribution of any consumer goods is eligible to serve on the Board.

- Nominations must be signed by the member, with the member's full name and address given.

- Nominations must be mailed, no later than April 22, 1946, to the Secretary of Consumers Union, 17 Union Square West, New York City 3.

- Nominations will also be made by the present Board of Directors which, in accordance with CU's by-laws, acts as a nominating committee.

Nominees selected by both Board and individual members will be voted on by CU members.

Consumers Union is a non-profit organization, therefore membership on the Board carries with it no compensation for members' services in this capacity.

The structure of the Board and the manner in which members are nominated and elected is further described in the following excerpts from the CU by-laws:

"There shall be not less than 15 nor more than 30 directors, as the directors may from time to time determine, holding office for three years . . .

"There shall be three groups of directors. . . Each group shall consist of approximately one-third of the total number of elected directors. . .

"In addition to the above, there shall be a director elected by the employees, as a 'staff representative' . . .

"The method of election of directors shall be as follows: The Board of Directors shall act as a nominating committee to place in nomination candidates for such vacancies as may exist. Candidates may also be nominated by petition. Such petition shall be signed by one or more members in good standing and must be filed with the Secretary not later than two months prior to the date of the annual meeting.

"The ballots must be sent out to the membership at least one month before the date of election. The ballot shall designate the Secretary to act as a proxy to vote at the annual meeting as directed in said ballot. The form of said ballot shall be determined by the Board of Directors. Upon said ballot, however, the names of all candidates shall be alphabetically listed, and Board nominees shall be designated as such on said ballot. The Board of Directors shall include on the ballot a statement concerning the record of each nominee. Each nominee, upon accepting nomination, shall be required to answer such questions as may be put to him at the instance of the Board of Directors, concerning his record, financial interests and other connections. The Board of Directors may, in its discretion, by a two-thirds vote, reject any nominee whose past actions or record are such that the Board deems the candidacy of such nominee to be inimical to the best interests of this organization.

"All notices in respect to said nominations and election and the ballot for said election may be included in the regular publications of the organization.

"Only such ballots as are returned at least one week prior to the annual meeting shall be considered.

"All candidates shall be notified of the time and place of the opening and counting of ballot and shall have the right to be present in person or by a representative at such time and place."

## CUMULATIVE INDEX

Each issue of the Reports contains this cumulative index of principal subjects covered since publication of the 1946 Buying Guide issue. By supplementing the Buying Guide index with this one, members can quickly locate current material and keep abreast of changes resulting from new tests. Page numbers run consecutively beginning with the January 1946 issue: Jan. 1-28, Feb. 29-56, Mar. 57-84.

Autos, Winter Care .....	7
—Keiser, Frazer .....	60
Batteries, Storage .....	72
Beer .....	68
Boilers, Heating .....	14
Chemotherapy .....	76
Child Psychology .....	78
Citrus Juices .....	42
Colds .....	47
Creams, Cleansing .....	35
Dyes, Fabric .....	9
Face Powder .....	62
Fluorine and Tooth Decay .....	21
Furnaces .....	14
Gardening, Hobbies .....	70
Heating Equipment .....	14
Housing .....	54
Insurance, Life .....	24, 52
Laxatives, Ex-Lax .....	81
Lemons & Colds .....	47
Lipstick .....	4
Medical Care .....	26, 82
Orange Juice .....	42
Peaches, Canned .....	12
Penicillin .....	76
Powder, Face .....	62
RH Factor .....	80
Radios, Small .....	32, 65
Rugs, Care & Repair .....	73
Slips, Women's .....	39
Stokers .....	14
Storage Batteries .....	72
Sulfa Drugs .....	76
Teeth, Fluorine and Decay .....	21
Tropical Disease .....	44
Wagner-Murray-Dingell Bill .....	26, 48, 82
Window Cleaners .....	11

## CONSUMERS UNION

17 UNION SQUARE WEST  
NEW YORK 3, N. Y.

### I ENCLOSE \$4 FOR WHICH PLEASE

- ☐ Enter my subscription for the Reports (including the Buying Guide issue) and Bread & Butter for one year.
- ☐ Renew my subscription for one year and send me Bread & Butter to run concurrently with the Reports.

### I ENCLOSE \$3.50 FOR WHICH PLEASE

- ☐ Enter my subscription for the Reports (including the Buying Guide issue) for one year.
- ☐ Renew my subscription for one year.

NAME.....

ADDRESS.....

3CU

# For Your Bookshelf—

**STILL AVAILABLE**

**1936-37**

**1938**

**1939**

**1940**

**1941**

**1942**

**1943**

**1944**



*and now . . .*

## **VOLUME X 1945**

*to add  
to your collection of*

**HANDSOMELY-BOUND COPIES OF**

# **CONSUMER REPORTS**

In them you'll find a wealth of useful information, much of it as valuable now as on the day it was published: advice on how to buy many products, information on health and medicine, and a history of the consumer movement over the past decade.

Libraries, teachers, students and others will find this fully-indexed, cloth-bound set invaluable.

### **CONSUMERS UNION OF U. S., Inc.**

17 UNION SQUARE WEST • NEW YORK 3, N. Y.

I am enclosing \$..... for which please send me the bound volumes checked below:

- ☐ Complete set, 1936 through 1945, \$15.
- ☐ The following three for \$5:.....
- ☐ 1945 volume, for \$2.50.
- ☐ The following volumes for \$1.75 each:

NAME.....

ADDRESS.....

*Quantities of some volumes are limited. Place your order now to make sure you get all copies.*

- All nine volumes for \$15
- Any three volumes for \$5
- 1945 volume for \$2.50
- Other volumes: \$1.75 each